

APPENDIX II

TAB F

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

Page 1

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

TAMMY KITZMILLER; BRYAN AND
CHRISTY REHM; DEBORAH FENIMORE
AND JOEL LIEB; STEVEN STOUGH;
BETH EVELAND; CYNTHIA SNEATH;
JULIE SMITH; AND ARALENE
("BARRIE") D. AND FREDERICK B.
CALLAHAN,

Plaintiffs,

vs.

Case No. 4 CV 04-2688

DOVER AREA SCHOOL DISTRICT;
DOVER AREA SCHOOL DISTRICT
BOARD OF DIRECTORS,

Defendants.

/

DEPONENT: DICK M. CARPENTER, II, Ph.D.
DATE: Tuesday, May 17, 2005
TIME: 9:39 a.m.
LOCATION: 100 Renaissance Center, 36th Floor
Detroit, Michigan
REPORTER: Elizabeth G. LaBarge, CSR-4467

COPY

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p>Page 2</p> <p>1 APPEARANCES:</p> <p>2</p> <p>3 WITOLD WALCZAK</p> <p>4 American Civil Liberties Union of Pennsylvania</p> <p>5 313 Atwood Street</p> <p>6 Pittsburgh, Pennsylvania 15213</p> <p>7 (412) 681-7736</p> <p>8 Appearing on behalf of the Plaintiffs.</p> <p>9</p> <p>10 RICHARD THOMPSON</p> <p>11 Thomas Moore Law Center</p> <p>12 24 Frank Lloyd Wright Drive</p> <p>13 Ann Arbor, Michigan 48105</p> <p>14 (734) 827-2001</p> <p>15 Appearing on behalf of the Defendants.</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>Page 4</p> <p>1 Detroit, Michigan</p> <p>2 Tuesday, May 17, 2005</p> <p>3 9:39 a.m.</p> <p>4 * * *</p> <p>5 DICK M. CARPENTER, II, Ph.D.</p> <p>6 having been first duly sworn, was examined and testified</p> <p>7 as follows:</p> <p>8 EXAMINATION</p> <p>9 BY MR. WALCZAK:</p> <p>10 Q My name is Vic Walczak, I am one of the attorneys for</p> <p>11 the plaintiffs in the case of Kitzmiller versus Dover</p> <p>12 Area School District. How are you today?</p> <p>13 A Good, thank you.</p> <p>14 Q How would you prefer that I address you?</p> <p>15 A Whatever you're most comfortable.</p> <p>16 Q Actually, I'm doing it for your comfort.</p> <p>17 A Okay. Just call me Dick.</p> <p>18 Q Dick?</p> <p>19 A Yeah.</p> <p>20 Q Okay. Is this your first ever deposition?</p> <p>21 A No, this is the second.</p> <p>22 Q What was your first deposition?</p> <p>23 A It was a case, Hanson v. Ann Arbor Schools, I think.</p> <p>24 Q And who deposed you in that case?</p> <p>25 A The name of the attorney?</p>
<p>Page 3</p> <p>1 INDEX</p> <p>2</p> <p>3 WITNESS PAGE</p> <p>4 DICK M. CARPENTER, II, Ph.D.</p> <p>5 Examination by Mr. Walczak 4</p> <p>6</p> <p>7</p> <p>8</p> <p>9 EXHIBITS</p> <p>10</p> <p>11 NUMBER IDENTIFICATION PAGE</p> <p>12 No. 1 Disclosure of Expert Testimony 6</p> <p>13 No. 2 Chapter 1, The Science of Biology 106</p> <p>14 No. 3 Appendix B, Academic Standards for</p> <p>15 Science and Technology and</p> <p>16 Environment and Ecology 132</p> <p>17 No. 4 Excerpt from Of Pandas and People 143</p> <p>18 No. 5 Document entitled The Wedge 148</p> <p>19 No. 6 Document entitled Intelligent Design</p> <p>20 A Debate Evolves 156</p> <p>21 No. 7 Document entitled Discovery Calls</p> <p>22 Dover Evolution Policy Misguided,</p> <p>23 Calls for its Withdrawal 172</p> <p>24 No. 8 Vita 181</p> <p>25 * * *</p>	<p>Page 3</p> <p>1 Q Who did the attorney represent?</p> <p>2 A Ann Arbor Schools.</p> <p>3 Q What was the nature of that case?</p> <p>4 A The student was suing the school for free speech and</p> <p>5 religious freedom issues.</p> <p>6 Q And were you representing the plaintiff or the</p> <p>7 defendants?</p> <p>8 A In that case, it was the plaintiff.</p> <p>9 Q We're going to be here most of the day, I think, and I</p> <p>10 want to make sure you're comfortable. There are cold</p> <p>11 and hot drinks there. If at some point you need a</p> <p>12 break, which I think we're all going to need breaks,</p> <p>13 feel free to ask. I would just ask that you not request</p> <p>14 a break immediately after I've asked a question.</p> <p>15 A Okay.</p> <p>16 Q So if you need a break, wait until you've given an</p> <p>17 answer to the question. Or if you're waiting for my</p> <p>18 next question, then by all means, we'll take a break.</p> <p>19 If you don't hear something that I said or if you</p> <p>20 don't understand my question, I'd ask that you tell me</p> <p>21 and I'll either say it louder or I'll rephrase it, but</p> <p>22 if you answer the question, I'm going to have to assume</p> <p>23 that you both heard and understood it, is that fair?</p> <p>24 A Yes.</p> <p>25 Q The other thing is that Beth is really, really good, but</p>

2 (Pages 2 to 5)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 6</p> <p>1 she cannot take down nods of the head or shrugs of the</p> <p>2 shoulders and so your responses need to be audible.</p> <p>3 A Yes.</p> <p>4 Q And I've also heard that as good as she is, that she</p> <p>5 cannot take down both of us talking at the same time, so</p> <p>6 I'm going to try to wait until you respond and I ask</p> <p>7 that you wait until I've finished my question.</p> <p>8 A Understood.</p> <p>9 Q Any questions for me before we start?</p> <p>10 A Not yet.</p> <p>11 Q Last chance, because I'm the one doing the questioning</p> <p>12 here.</p> <p>13 MR. WALCZAK: Can we mark this as Plaintiff's</p> <p>14 Exhibit 1?</p> <p>15 (Exhibit Number 1 was marked for identification.)</p> <p>16 BY MR. WALCZAK:</p> <p>17 Q I show you what's been marked as Exhibit 1.</p> <p>18 Do you recognize this?</p> <p>19 A Yes.</p> <p>20 Q What is it?</p> <p>21 A That's an expert report.</p> <p>22 Q Whose expert report?</p> <p>23 A Mine.</p> <p>24 Q Is this something you've submitted in this Dover</p> <p>25 litigation?</p>	<p style="text-align: right;">Page 8</p> <p>1 districts, decision-making, both in the global sense of</p> <p>2 just leadership and management, but also specific to</p> <p>3 schools and school districts.</p> <p>4 Q Do you recognize an area known as science education?</p> <p>5 A I'm not sure I understand what you mean by "recognize."</p> <p>6 Q Is there an area of expertise that would be called</p> <p>7 science education?</p> <p>8 A Um-hmm, yes, that's correct.</p> <p>9 Q And do you have expertise in that area?</p> <p>10 A Not specific to science education.</p> <p>11 Q What do you mean, what expertise do you have at all</p> <p>12 about science education?</p> <p>13 A Well, that's what I mean, not specific to science</p> <p>14 education, but more globally to issues of education and</p> <p>15 curriculum and pedagogy as it relates to schools.</p> <p>16 Q But you recognize that there is a -- I guess a</p> <p>17 subspecialty of education on science education?</p> <p>18 A Yes, a sub-discipline, correct.</p> <p>19 Q Thanks for correcting my terminology.</p> <p>20 But you are not an expert in the sub-discipline of</p> <p>21 science education?</p> <p>22 A Not in science education, correct.</p> <p>23 Q More generally in education?</p> <p>24 A Yeah. When you're -- educational leaders are</p> <p>25 generalists by nature. When you work as a school</p>
<p style="text-align: right;">Page 7</p> <p>1 A Correct.</p> <p>2 Q And this contains your opinions about the case?</p> <p>3 A Correct.</p> <p>4 Q We're going to spend the bulk of the day going over this</p> <p>5 report.</p> <p>6 A Understood.</p> <p>7 Q I guess what I'm not clear on is your area of expertise.</p> <p>8 What are you an expert in?</p> <p>9 A In this particular case, education policy, practice,</p> <p>10 pedagogy.</p> <p>11 Q Is that all of those things?</p> <p>12 A Correct.</p> <p>13 Q When you say "in this case," are you a different kind of</p> <p>14 expert in another case?</p> <p>15 A It depends on the case. I might be able to talk about</p> <p>16 the U. S. presidency, for example, I do research on that</p> <p>17 area.</p> <p>18 Q So what are your areas of expertise?</p> <p>19 A In this particular case?</p> <p>20 Q Generally.</p> <p>21 A Okay. Well, I do research and teach in areas around</p> <p>22 educational leadership --</p> <p>23 Q What's that?</p> <p>24 A Educational leadership considers issues around the</p> <p>25 leadership and management of schools and school</p>	<p style="text-align: right;">Page 9</p> <p>1 principal, you have to be conversant in all types of</p> <p>2 pedagogy, pedagogy as it applies to all kinds of</p> <p>3 disciplines and sub-disciplines, so leadership and</p> <p>4 policy inevitably will deal with pedagogy as it applies</p> <p>5 to all classrooms.</p> <p>6 Q But there are, for instance, specific courses taught in</p> <p>7 science education?</p> <p>8 A In colleges of education, for example? Yes.</p> <p>9 Q I'd like for you to tell me all of the opinions that you</p> <p>10 have arrived at in this case?</p> <p>11 A Do you mean you want me to walk through this document?</p> <p>12 Q Whichever way you'd like. I want to go through and</p> <p>13 understand every opinion that you are prepared to</p> <p>14 advance if this case goes to trial about the Dover Area</p> <p>15 School District's new policy.</p> <p>16 And let's just get our definitions straight. What</p> <p>17 we're talking about is the policy passed by the School</p> <p>18 Board on October the 18th, 2004, plus any attendant</p> <p>19 implementation of that policy. So when I say "policy,"</p> <p>20 it's everything the School District is doing to further</p> <p>21 that October 18th Board statement.</p> <p>22 MR. THOMPSON: Objection. That does not</p> <p>23 characterize the issue here because the Complaint that</p> <p>24 was filed by the plaintiffs talked about the press</p> <p>25 release that was dated November 19th, I believe, and</p>

3 (Pages 6 to 9)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 10</p> <p>1 that included both the resolution and the following</p> <p>2 policy that was developed as a result of it, so I think</p> <p>3 that is the policy, if I'm not mistaken.</p> <p>4 MR. WALCZAK: Well, I want to define this as</p> <p>5 broadly as we can to include everything that the School</p> <p>6 District is doing pursuant to that one-sentence</p> <p>7 statement that was passed on October the 18th, and that</p> <p>8 would include the November 19th press release and the</p> <p>9 statement that the teachers read. Am I missing</p> <p>10 something?</p> <p>11 MR. THOMPSON: Yes. What I'm trying to point to is</p> <p>12 that the Complaint itself specifically is focused on the</p> <p>13 November 19th, 2004, press release, that is what the</p> <p>14 policy is that has been complained about, and that is</p> <p>15 what this lawsuit is all about, whether that policy is</p> <p>16 unconstitutional, as you have alleged. So going beyond</p> <p>17 that, I think, is not a fair characterization of the</p> <p>18 lawsuit.</p> <p>19 MR. WALCZAK: Well, I'm not doing this for purposes</p> <p>20 of characterization of the lawsuit, I'm doing this so</p> <p>21 that we can be on the same page in the questions. And I</p> <p>22 would reject your characterization of our lawsuit. We</p> <p>23 are challenging what's colloquially known as the</p> <p>24 intelligent design policy of the Dover School District,</p> <p>25 and that includes everything they've done in furtherance</p>	<p style="text-align: right;">Page 12</p> <p>1 MR. WALCZAK: That's fine.</p> <p>2 BY MR. WALCZAK:</p> <p>3 Q You can go ahead and answer.</p> <p>4 A Okay. Well, then I'll just walk through this then.</p> <p>5 Q However you'd like.</p> <p>6 A Okay. Well, first, in speaking about the policy, one of</p> <p>7 the ways to think about policy is what incentives does a</p> <p>8 policy create or what behaviors, for example, what goals</p> <p>9 does it set out, and one of the goals that might be</p> <p>10 perpetuated in this policy is the idea of critical</p> <p>11 thinking. And as in the report, there are different</p> <p>12 definitions of critical thinking.</p> <p>13 One that I include is that it's the ability to</p> <p>14 explore a problem, question, or situation, integrate all</p> <p>15 the available information about it, arrive at a solution</p> <p>16 or a hypothesis, and justify one's position. And then I</p> <p>17 include also in the report some different ways that one</p> <p>18 might think about it in terms of a structure around</p> <p>19 ideas of critical thinking. So what we see here is a</p> <p>20 policy that would encourage students to think critically</p> <p>21 about what they read and hear and learn in a classroom</p> <p>22 and outside of a classroom. So that's the first thing.</p> <p>23 The second thing is how can we - in education, we</p> <p>24 often talk about how can we encourage students to assume</p> <p>25 responsibility for their own learning. Rather than</p>
<p style="text-align: right;">Page 11</p> <p>1 of that.</p> <p>2 So what I'd like to do is - and maybe the best way</p> <p>3 to do this is to ask Dick about what it is he has</p> <p>4 considered in constructing his opinions, and I'll do</p> <p>5 that -</p> <p>6 MR. THOMPSON: Sure.</p> <p>7 MR. WALCZAK: - in short order.</p> <p>8 MR. THOMPSON: The other objection I have is that</p> <p>9 he has prepared an expert report and the document speaks</p> <p>10 for itself, unless you just want him to go ahead and</p> <p>11 read what he said.</p> <p>12 MR. WALCZAK: No, I want to make sure I understand</p> <p>13 what it is that his opinions are on this.</p> <p>14 MR. THOMPSON: Fine.</p> <p>15 BY MR. WALCZAK:</p> <p>16 Q So I'm going to ask you about the Dover School Board's</p> <p>17 intelligent design policy as I'm going to call it, and</p> <p>18 we'll come back to how you want to define that later,</p> <p>19 but why don't you tell me - again, you've obviously</p> <p>20 looked at this and come up with some opinions. Let's go</p> <p>21 through your opinions.</p> <p>22 MR. THOMPSON: And I just want the record to make</p> <p>23 clear I also object to the characterization of the</p> <p>24 School Board policy as the intelligent design policy and</p> <p>25 my continuing objection to those characterizations.</p>	<p style="text-align: right;">Page 13</p> <p>1 creating a passive one-way relationship in learning, how</p> <p>2 can we encourage students to take more responsibility</p> <p>3 and ownership in their learning. And this policy,</p> <p>4 statement, whatever we're calling it, does that, as</p> <p>5 well, or encourages that amongst students.</p> <p>6 The third thing is that it's aligned with various</p> <p>7 standards. For example, the Pennsylvania standards</p> <p>8 specifically state that students needs to know and</p> <p>9 assume they will be tested on evolution, and the policy</p> <p>10 makes it very clear that's what's going to be taught in</p> <p>11 class, and I assume that the implementation of it is</p> <p>12 consistent that what's going to be taught in class is</p> <p>13 evolution according to the Pennsylvania state standards.</p> <p>14 But also, the standards say this, that students should</p> <p>15 be taught to critically evaluate the status of existing</p> <p>16 theories and then it has various examples. One of those</p> <p>17 is the theory of evolution. So pursuant to that</p> <p>18 particular part of the standards, it's encouraging</p> <p>19 students to critically evaluate the status of a theory.</p> <p>20 In this case, the theory in question is evolution.</p> <p>21 And then finally, there was a part of No Child Left</p> <p>22 Behind that talks about the issue of discussing with</p> <p>23 students contemporary issues and controversies</p> <p>24 surrounding contemporary issues, and so this policy is</p> <p>25 consistent with that understanding from No Child Left</p>

4 (Pages 10 to 13)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 14</p> <p>1 Behind.</p> <p>2 Q Anything else?</p> <p>3 A Oh, I guess the last thing would be the policy also</p> <p>4 talks -- well, I guess I already addressed that, the</p> <p>5 idea of critically evaluating the status of existing</p> <p>6 theories, the notion that the theory of evolution is, as</p> <p>7 the National Science Education Standards call it,</p> <p>8 incomplete, so helping students understand that it's not</p> <p>9 fact, ironclad, but in fact is a developing theory.</p> <p>10 Q So that would be -- that last one would be your fourth</p> <p>11 point on page 3 of your expert report?</p> <p>12 A Correct, right.</p> <p>13 Q Your report also mentions introducing multiple ways of</p> <p>14 knowing?</p> <p>15 A Yes.</p> <p>16 Q You didn't discuss that. Is that an opinion you still</p> <p>17 hold?</p> <p>18 MR. THOMPSON: The first page.</p> <p>19 A Oh, yes, correct, right, yep.</p> <p>20 BY MR. WALCZAK:</p> <p>21 Q Explain that to me?</p> <p>22 A The three dollar word is epistemology. I define that in</p> <p>23 my research and stats class just as you said it, there</p> <p>24 are multiple ways of knowing and describing the world,</p> <p>25 reality, if you will, and there are different</p>	<p style="text-align: right;">Page 16</p> <p>1 A Correct.</p> <p>2 Q Any other opinions that you have formed for this case,</p> <p>3 anything since you wrote the report?</p> <p>4 A No, I think we should leave it at that.</p> <p>5 Q When you say "leave it at that," so you have no other</p> <p>6 opinions that you're prepared to advance about this</p> <p>7 case?</p> <p>8 MR. THOMPSON: Objection. It's a vague, ambiguous</p> <p>9 question.</p> <p>10 If you can answer it, go ahead.</p> <p>11 A I guess that's why I'm somewhat equivocating, because</p> <p>12 I'm not sure I understand what you're asking.</p> <p>13 BY MR. WALCZAK:</p> <p>14 Q We've just discussed what I'm calling your penultimate</p> <p>15 opinion and a number of sub-opinions, is that a fair</p> <p>16 assessment? I mean, you talk about promote critical</p> <p>17 thinking, you talk about encouraging students to assume</p> <p>18 responsibility, alignment with Pennsylvania state</p> <p>19 science standards, alignment with No Child Left Behind,</p> <p>20 accuracy in helping students understand that evolution</p> <p>21 has gaps and problems, promote multiple ways of knowing,</p> <p>22 with kind of the penultimate standard that the Dover</p> <p>23 policy and ultimate opinion that the Dover policy in</p> <p>24 fact is sound pedagogy?</p> <p>25 A Correct.</p>
<p style="text-align: right;">Page 15</p> <p>1 understandings amongst different members of the</p> <p>2 community, research community, and outside of the</p> <p>3 research community, as well, so introducing students to</p> <p>4 this awareness, this understanding that there are</p> <p>5 multiple ways of knowing, there are different</p> <p>6 epistemologies.</p> <p>7 Q Is that concept appropriate in science class?</p> <p>8 A It's appropriate in any class, in any curriculum,</p> <p>9 pedagogy, that students understand the different ways of</p> <p>10 knowing and understanding.</p> <p>11 Q We're going to come back to that.</p> <p>12 Do you have kind of -- I mean, it strikes me these</p> <p>13 are all sub-opinions of your grand opinion, which is</p> <p>14 that teaching problems and gaps in the theory of</p> <p>15 evolution, making students aware of alternative theories</p> <p>16 such as intelligent design, and making resources</p> <p>17 available to students to pursue independent inquiry</p> <p>18 promotes legitimate pedagogical and educational goals,</p> <p>19 and therefore enhances student learning.</p> <p>20 Is that kind of your penultimate conclusion here?</p> <p>21 A I assume you're reading from the report?</p> <p>22 Q I'm reading from what I think is your report. That</p> <p>23 would be on the second to last paragraph on page 4.</p> <p>24 A Um-hmm. I'm sorry, yes.</p> <p>25 Q And that's kind of your penultimate conclusion?</p>	<p style="text-align: right;">Page 17</p> <p>1 Q Are there any other kind of ultimate opinions, as I call</p> <p>2 them, or sub-opinions that you would like to add?</p> <p>3 A Not at this time.</p> <p>4 Q And if at some point you come up with more, of course,</p> <p>5 you'll let counsel know and counsel will let us know?</p> <p>6 MR. WALCZAK: Is that a yes?</p> <p>7 MR. THOMPSON: Yes, if you ask the question. Now,</p> <p>8 what I'm objecting to, it's such a vague question that</p> <p>9 if you ask him does he have an opinion on a particular</p> <p>10 topic, I think he can answer, but when you have such a</p> <p>11 general question, it's pretty hard to answer.</p> <p>12 MR. WALCZAK: Right now what I've gotten is that</p> <p>13 Dick has agreed, in essence, that his opinions are what</p> <p>14 they've been stated in the report. To the extent they</p> <p>15 go broader than that, I'm asking that you advise me of</p> <p>16 that fact and then we can decide whether or not to</p> <p>17 resume the deposition.</p> <p>18 MR. THOMPSON: Correct. Fine, we can do that.</p> <p>19 BY MR. WALCZAK:</p> <p>20 Q What I'd like to do now is to explore everything you did</p> <p>21 to come up with your opinions in this case, what is it</p> <p>22 that you looked at, why you looked at it, and when. So</p> <p>23 why don't you take me through sort of what you did to</p> <p>24 come up with these various opinions we've just</p> <p>25 discussed?</p>

5 (Pages 14 to 17)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 18</p> <p>1 A Okay. Well, first was to look at the policy and the</p> <p>2 statement that's read to the students and the press</p> <p>3 release that was pursuant to that.</p> <p>4 Q Let me stop you. I'm going to probably interrupt a lot</p> <p>5 here and I apologize.</p> <p>6 A Okay.</p> <p>7 Q I think we need to get some definition.</p> <p>8 When you say look at the policy, what are you</p> <p>9 referring to?</p> <p>10 A The policy that was part of the press release as it's</p> <p>11 written, students will be made aware of gaps and</p> <p>12 problems in Darwin's theory and of other theories of</p> <p>13 evolution, including but not limited to intelligent</p> <p>14 design, the origins of life is not taught.</p> <p>15 Q So you looked at the November 19th press release?</p> <p>16 A The statement included within -- yes, ultimately, yes,</p> <p>17 correct, I was looking at the press release, and then</p> <p>18 the policy statement that was part of that press</p> <p>19 release, and then the statement that is read to</p> <p>20 students, as well, which again is part of that press</p> <p>21 release. So that's what I mean by policy and then the</p> <p>22 statement that's read to students.</p> <p>23 Q What else did you look at to consider the policy?</p> <p>24 A Obviously, the press release. And then I did some</p> <p>25 literature review on --</p>	<p style="text-align: right;">Page 20</p> <p>1 from the course text.</p> <p>2 Q What specifically did you look at?</p> <p>3 A The portion of the book that talks about evolution</p> <p>4 specifically. There's a page in the book that tells</p> <p>5 readers this idea that evolution is a developing theory,</p> <p>6 that there are questions, gaps, and so forth.</p> <p>7 Q So the book is the Levine and Miller textbook?</p> <p>8 A That is correct.</p> <p>9 Q And did you look at just that page or did you read the</p> <p>10 entire chapter?</p> <p>11 A At that time, I looked at that page.</p> <p>12 Q Which page is that, do you know?</p> <p>13 A Page 386.</p> <p>14 Q So that's the only page of the book that you looked at?</p> <p>15 A For the report, yes.</p> <p>16 Q And how did you decide to look at page 386?</p> <p>17 A It was brought to my attention that in the book there</p> <p>18 was reference to this particular issue around evolution.</p> <p>19 Q Who brought it to your attention?</p> <p>20 A One of the attorneys for the defense.</p> <p>21 Q Who was that?</p> <p>22 A Robert Muise.</p> <p>23 Q And what did you learn on that page?</p> <p>24 A Essentially as I described it, that Miller and</p> <p>25 Levine -- or Levine, I don't know which is -- how he</p>
<p style="text-align: right;">Page 19</p> <p>1 Q Let's stop with the policy here. So you looked at the</p> <p>2 November 19th press release which includes that</p> <p>3 four-paragraph statement that teachers read to students?</p> <p>4 A Correct.</p> <p>5 Q Did you look at the Board resolution passed on October</p> <p>6 the 18th?</p> <p>7 A If you're referring to this statement? Right there?</p> <p>8 Q I'm not sure what "this" is.</p> <p>9 A "This" being students will be made aware of gaps,</p> <p>10 et cetera, et cetera.</p> <p>11 Q Okay. So that does -- the press release includes that</p> <p>12 October 18th --</p> <p>13 A Policy statement.</p> <p>14 Q Right. Anything else you looked at?</p> <p>15 A So then we -- I looked at -- did a literature -- well, a</p> <p>16 literature review, I guess, one might call it pursuant</p> <p>17 to the issue at hand. As I listed in my report, I</p> <p>18 looked at the Pennsylvania state standards, specifically</p> <p>19 those that are related to science and technology. In</p> <p>20 preparation -- I assume you're talking about in</p> <p>21 preparation for the report?</p> <p>22 Q Um-hmm.</p> <p>23 A Okay. Also in preparation for the report I looked and</p> <p>24 read through Dr. Behe's expert report which was</p> <p>25 available at that time. I also looked at an excerpt</p>	<p style="text-align: right;">Page 21</p> <p>1 pronounces it, essentially as it describes, that</p> <p>2 evolution is a developing theory, and that as new data</p> <p>3 are released, that the theory continues to evolve, no</p> <p>4 pun intended.</p> <p>5 Q Was that something new to you?</p> <p>6 A That evolution is a developing theory? No.</p> <p>7 Q So I guess I'm not sure why you read it and what was the</p> <p>8 significance of that page for you?</p> <p>9 A Well, it was understanding that in the course text,</p> <p>10 there is something related to the policy that the School</p> <p>11 Board passed.</p> <p>12 Q And so you didn't read the rest of the book?</p> <p>13 A Not in detail, no.</p> <p>14 Q Did you read it at all?</p> <p>15 A The entire rest of the book?</p> <p>16 Q Yeah.</p> <p>17 A I mean, I skimmed portions. Not for the report, after.</p> <p>18 Q Why did you do it after?</p> <p>19 A To come to an understanding of kind of the tenor, the</p> <p>20 text of the rest of the book, what it covers and so</p> <p>21 forth.</p> <p>22 Q But you didn't do that before you wrote the report?</p> <p>23 A I didn't have it available to me before the report.</p> <p>24 Q So the only thing you had available to you was that one</p> <p>25 page that you got from Mr. Muise?</p>

6 (Pages 18 to 21)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 22</p> <p>1 A Correct.</p> <p>2 Q What else did you look at?</p> <p>3 A Well, the various references from the literature review</p> <p>4 that are included in the report.</p> <p>5 Q So that would be the references on Exhibit 1 at the</p> <p>6 bottom of page 4?</p> <p>7 A Correct. And then there are, obviously, others as part</p> <p>8 of a literature review that you skim or read but don't</p> <p>9 necessarily reference.</p> <p>10 Q Let's go over those. What else did you skim or read to</p> <p>11 prepare for this report?</p> <p>12 A Other various articles related to what you see here in</p> <p>13 the references.</p> <p>14 Q References -- I'm sorry, you've got to unpack that for</p> <p>15 me.</p> <p>16 A Sure. The references on page 4, there are other</p> <p>17 articles that are related to things that you see here.</p> <p>18 For instance, Petress, Ken Petress's work, there are</p> <p>19 other references that said very similar things to</p> <p>20 Petress. I didn't reference those because it would be</p> <p>21 redundant.</p> <p>22 Q What I'd like to do is go over those. What were those</p> <p>23 sources?</p> <p>24 A I couldn't even tell you. I couldn't tell you by name.</p> <p>25 Q Why?</p>	<p style="text-align: right;">Page 24</p> <p>1 have to understand, in a literature review, you skim or</p> <p>2 read just gobs of things, but you're not necessarily</p> <p>3 prepared to use them, you're just looking to make a</p> <p>4 value judgment, would I use this, is this good, bad</p> <p>5 information, is it related to this. Because when you're</p> <p>6 doing a literature review, you see a title in a data</p> <p>7 base and the title may be something that would relate to</p> <p>8 this topic and it may not be, so you have to inevitably</p> <p>9 open it and skim it to see, okay, is this related, is it</p> <p>10 not related.</p> <p>11 Q So the seven references listed on page 4 of your report,</p> <p>12 those are the key pieces of literature that you actually</p> <p>13 consulted and relied on in producing your opinions?</p> <p>14 A Correct.</p> <p>15 Q What else did you do to prepare for this report?</p> <p>16 A Well, inevitably there's kind of the thinking and</p> <p>17 analysis that goes into it, so taking into account these</p> <p>18 things that you see listed here, taking into account my</p> <p>19 own --</p> <p>20 Q Wait. When you say "listed here," what are you --</p> <p>21 A I'm sorry. The references on page 4.</p> <p>22 Q Okay.</p> <p>23 A The experiences that I have had as a principal, things</p> <p>24 that I've written about or taught or read just in</p> <p>25 general about pedagogy and learning and leadership and</p>
<p style="text-align: right;">Page 23</p> <p>1 A Oh, I didn't commit them to memory.</p> <p>2 Q Are these not well known --</p> <p>3 A Well, very few of these would be well known to the</p> <p>4 general public. I only referenced or was prepared to</p> <p>5 talk about those things that I've cited specifically.</p> <p>6 In a literature review, you'll typically skim or read</p> <p>7 through tens, dozens, scores, hundreds of different</p> <p>8 things, but that doesn't necessarily mean you've</p> <p>9 prepared to be conversant about those that you didn't</p> <p>10 necessarily reference.</p> <p>11 Q Which ones did you end up consulting to write this</p> <p>12 report?</p> <p>13 A Those that are listed in the reference section.</p> <p>14 Q It's really important for me to understand what else you</p> <p>15 looked at in trying to figure out this report. I mean,</p> <p>16 what kind of texts are we talking about?</p> <p>17 A Well, that's what I'm saying, when I say they're related</p> <p>18 to what you see here, they're things that are like what</p> <p>19 you see in the reference section, so they're articles</p> <p>20 like you see listed here or book chapters like you see</p> <p>21 listed here.</p> <p>22 Q But you can't name any others that you consulted?</p> <p>23 A How do you define "consulted"?</p> <p>24 Q Read, skimmed, looked at in preparation for this report.</p> <p>25 A No, I could not, I did not commit them to memory. You</p>	<p style="text-align: right;">Page 25</p> <p>1 decision-making and so forth, through that frame or that</p> <p>2 filter came to conclusions and analyzed those into this</p> <p>3 report.</p> <p>4 Q Did you look at anything else?</p> <p>5 A By anything else, do you mean other references?</p> <p>6 Q Did you talk to anybody about this matter?</p> <p>7 A By anybody, what do you mean by anybody?</p> <p>8 Q The world.</p> <p>9 A That's pretty big. If you mean any --</p> <p>10 Q Did you talk to a lot of people?</p> <p>11 A No, certainly not.</p> <p>12 Q Who did you talk to in thinking about what you say in</p> <p>13 this report?</p> <p>14 A Obviously, I was talking to the counsel for the defense</p> <p>15 to understand what was going on.</p> <p>16 Q Is that Mr. Muise?</p> <p>17 A Correct.</p> <p>18 MR. WALCZAK: And I think we have an agreement that</p> <p>19 we're not going to inquire as to communications. Is</p> <p>20 that your understanding, Dick?</p> <p>21 MR. THOMPSON: Correct.</p> <p>22 BY MR. WALCZAK:</p> <p>23 Q So you talked to Mr. Muise?</p> <p>24 A Um-hmm.</p> <p>25 Q Who else did you talk to?</p>

7 (Pages 22 to 25)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 26</p> <p>1 A That was it.</p> <p>2 Q That was it?</p> <p>3 A Yep.</p> <p>4 Q Did you talk to anybody else at your school?</p> <p>5 A No.</p> <p>6 Q Did you go to any conferences about this?</p> <p>7 A Specific to this? No.</p> <p>8 Q Is there anything else that you feel that you need to do before you go to trial and testify on this case?</p> <p>9 A Well, having never done that --</p> <p>10 Q "Done that" being?</p> <p>11 A Being gone to trial to testify in a case, I don't know that I -- it would all be theorizing at this point, it would all be supposition.</p> <p>12 Q How comfortable are you with your opinions here?</p> <p>13 A Well, comfortable enough that I would put them in print.</p> <p>14 Q So you're certain that you've come to the right opinion here?</p> <p>15 A As certain as one can be with available information.</p> <p>16 Q And the available information is what you've looked at here and what we've just discussed?</p> <p>17 A Correct.</p> <p>18 Q Well, let me rephrase my last question. And Dick Thompson will certainly correct me if I'm misadvising you here. But right now we're scheduled to go to trial</p>	<p style="text-align: right;">Page 28</p> <p>1 MR. WALCZAK: I did say depositions, but thank you, I stand corrected.</p> <p>2 BY MR. WALCZAK:</p> <p>3 Q What else have you done since you produced the report and prior to coming here today, what else have you looked at or read in relation to this subject?</p> <p>4 A I read through the National Science Education Standards.</p> <p>5 Q So you read those after you submitted the report?</p> <p>6 A Correct. Did a little bit more literature review.</p> <p>7 Q What did you find that you thought was relevant?</p> <p>8 A There were a couple of articles examining the testability of evolution, so there were some authors discussing that. Also looked at some contemporary newspaper articles around the issue as it applied to other areas.</p> <p>9 Q What do you mean, other areas?</p> <p>10 A Other parts of the country.</p> <p>11 Q Can you tell me what those articles examining testability of evolution were?</p> <p>12 A By name?</p> <p>13 Q Um-hmm. Or by author.</p> <p>14 A Sure. One of them is by Penny, Hendy, and Poole.</p> <p>15 Q How do you spell that?</p> <p>16 A Penny is Penny, P-e-n-n-y. The next one is Hendy, H-e-n-d-y. And the final one is Poole, P-o-o-l-e.</p>
<p style="text-align: right;">Page 27</p> <p>1 on September the 26th. It doesn't look like there's going to be an amicable resolution to this, so we're pretty much expecting this is going to go to trial. You're going to be asked to come to the stand presumably, I don't know that you're committed to do that, but we expect that you will be called to present these opinions in court. Again, you'll be under oath and there will be a judge.</p> <p>2 Is there anything else that you would do that you haven't already done to prepare yourself for that trial?</p> <p>3 A Well, again, I'm just theorizing, I'm guessing. I would be interested in certainly reading through other depositions and seeing what others have to say.</p> <p>4 Q When you say other depositions, whose depositions?</p> <p>5 A Of the expert witnesses.</p> <p>6 Q Why?</p> <p>7 A Just as I read all of the expert reports after this report, I've come to some understanding of the facts in the case and other opinions in the case.</p> <p>8 Q So you've in addition to the things we've discussed, since the report, you have read which expert depositions?</p> <p>9 A All of them.</p> <p>10 MR. THOMPSON: He meant expert reports. I thought you said depositions.</p>	<p style="text-align: right;">Page 29</p> <p>1 Title, Testing Fundamental Evolutionary Hypotheses.</p> <p>2 Q Do you know when that was put out?</p> <p>3 A I do. 2003.</p> <p>4 Q What did you find significant about that article?</p> <p>5 A Did you want the other one first or --</p> <p>6 Q No, let's do that and then we'll come back and do the other one.</p> <p>7 A Okay. It might be helpful to do the other one first because that was written in response to the first one. This is a -- Penny and Hendy were writing in response to Sober and Steel.</p> <p>8 Q The other one was what?</p> <p>9 A Sober, S-o-b-e-r, and Steel, as you would expect it, without -- S-t-e-e-l.</p> <p>10 Q Okay.</p> <p>11 A Title, Testing the Hypothesis of Common Ancestry.</p> <p>12 Q And the date on that?</p> <p>13 A 2002.</p> <p>14 Q And what did you find significant about Sober and Steel?</p> <p>15 A Okay. Sober and Steel, as the title implies, were taking the issue of common ancestry and looking to see is it a testable theory. If it is testable, how might one test it. And they came to the conclusion that it is an intrinsically difficult theory to test.</p> <p>16 Q Okay. Anything else?</p>

8 (Pages 26 to 29)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 30</p> <p>1 A I mean, obviously, it was a long article, but that's</p> <p>2 probably the biggest upshot of the article.</p> <p>3 Q Was it impossible to test or difficult to test?</p> <p>4 A No, they said intrinsically difficult.</p> <p>5 Q How did you find this publication?</p> <p>6 A Through a literature review.</p> <p>7 Q Why did you select it?</p> <p>8 A Because it was an example of scientists who are</p> <p>9 currently discussing certain tenets of evolution.</p> <p>10 Q What do you mean, currently discussing tenets of</p> <p>11 evolution?</p> <p>12 A It's obviously a contemporary discussion within the</p> <p>13 community.</p> <p>14 Q And what is it that they're discussing about evolution?</p> <p>15 A In this case, they were discussing -- the authors were</p> <p>16 saying that the issue of common ancestry is one of the</p> <p>17 features of evolution, and their word was it is an</p> <p>18 assumed feature of evolution, and that because it is</p> <p>19 assumed, scientists need to check their assumptions.</p> <p>20 And so in this case, they were testing their assumption,</p> <p>21 or that assumption.</p> <p>22 Q And found that it was intrinsically difficult to test?</p> <p>23 A Correct.</p> <p>24 Q Is there some implication to that?</p> <p>25 A Well, the authors are saying we need to be aware of our</p>	<p style="text-align: right;">Page 32</p> <p>1 recommendation for testing, they say here's how you</p> <p>2 might use this recommendation in other ways with other</p> <p>3 alternatives, so they demonstrated or illustrated upon</p> <p>4 other alternatives, including intelligent design.</p> <p>5 Q What did they say about intelligent design?</p> <p>6 A They were -- they didn't really say -- I mean, it wasn't</p> <p>7 an article about intelligent design, it was just taking</p> <p>8 their hypothesis and applying it to intelligent design.</p> <p>9 Q So they're saying the same kind of test could be done</p> <p>10 for intelligent design?</p> <p>11 A Correct. Yeah.</p> <p>12 Q So how would that test work?</p> <p>13 A Do you want to talk about it in detail, the particular</p> <p>14 test?</p> <p>15 Q What could you tell me about it, how would you test</p> <p>16 intelligent design?</p> <p>17 A I don't know that I'd want to be speaking on behalf of</p> <p>18 Penny and their test, that's not my expertise.</p> <p>19 Q What's not your expertise?</p> <p>20 A Their particular hypothesis and so forth.</p> <p>21 Q Can you summarize it for me, how you would test for</p> <p>22 intelligent design?</p> <p>23 A I would have to have it in front of me to kind of walk</p> <p>24 you through it.</p> <p>25 Q Do you have it?</p>
<p style="text-align: right;">Page 31</p> <p>1 assumptions, and if we have assumptions about things</p> <p>2 that are difficult to test, how solid can our</p> <p>3 assumptions be. And I'm paraphrasing the authors.</p> <p>4 Q And do you agree with that?</p> <p>5 A Certainly in the general sense, yes. If we have</p> <p>6 assumptions that are difficult to test, one needs to</p> <p>7 think critically about our assumptions.</p> <p>8 Q Anything else on Sober that you found significant?</p> <p>9 A No. I mean, well, I wouldn't say no. It was</p> <p>10 interesting. But not pursuant to this.</p> <p>11 Q And so then you read the Penny book, which was, I</p> <p>12 guess --</p> <p>13 A It's an article.</p> <p>14 Q It's an article?</p> <p>15 A Yeah.</p> <p>16 Q And what were they talking about there?</p> <p>17 A They were responding by saying -- first, they were</p> <p>18 confirming things that Sober and Steel said, yes, it is</p> <p>19 an assumption, or yes, the science community often</p> <p>20 assumes this. They commended them for raising the issue</p> <p>21 and recommended others do likewise. And then they went</p> <p>22 on to examine Sober and Steel's supposition, the idea</p> <p>23 that it's intrinsically difficult to test, and</p> <p>24 recommended how one might go about testing it. And then</p> <p>25 they also said -- after they kind of lay out their</p>	<p style="text-align: right;">Page 33</p> <p>1 A Only in electronic version on my laptop.</p> <p>2 Q What do you remember?</p> <p>3 A Again, I didn't commit it to memory.</p> <p>4 Q Well, what do you remember?</p> <p>5 A Pretty much what I've explained to you, the idea of</p> <p>6 testability, that was the critical issue in the article.</p> <p>7 Q But you don't remember how you could test it?</p> <p>8 A I'd have to go back and read it. That's not something I</p> <p>9 committed to memory.</p> <p>10 Q So you do not remember how --</p> <p>11 A Correct, I didn't commit it to memory.</p> <p>12 Q Let's go back to National Science Education Standards.</p> <p>13 These are all things you looked at after you produced</p> <p>14 your report?</p> <p>15 A Correct.</p> <p>16 Q Why did you go back and look at these things?</p> <p>17 A I was asked to craft a rebuttal to some points.</p> <p>18 Q Who asked you to do that?</p> <p>19 A The counsel for the defense.</p> <p>20 Q And what were you asked to craft a rebuttal to?</p> <p>21 MR. THOMPSON: Objection, attorney work product.</p> <p>22 This is conversations he had with an attorney.</p> <p>23 MR. WALCZAK: Have you all submitted a rebuttal?</p> <p>24 MR. THOMPSON: I think there were rebuttals that</p> <p>25 were going to be submitted yesterday. I haven't seen</p>

9 (Pages 30 to 33)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

Page 34	Page 36
<p>1 them, but I know --</p> <p>2 MR. WALCZAK: Because we submitted one.</p> <p>3 MR. THOMPSON: Okay. I believe that Mr. Muise and</p> <p>4 Pat Gillen were working on submitting rebuttals, I think</p> <p>5 yesterday was the last day. I don't want to</p> <p>6 mischaracterize what the status is. So I think that</p> <p>7 rebuttals were submitted. Now, I don't know if a Dick</p> <p>8 Carpenter rebuttal was one of those submitted.</p> <p>9 And you can respond yes or no on that. I don't --</p> <p>10 A My understanding is that it was.</p> <p>11 BY MR. WALCZAK:</p> <p>12 Q It was?</p> <p>13 A That it was faxed -- I faxed it yesterday before I got</p> <p>14 on the plane.</p> <p>15 MR. WALCZAK: I don't think we want to do this</p> <p>16 again, we've --</p> <p>17 MR. THOMPSON: Right.</p> <p>18 MR. WALCZAK: -- had enough depositions. Can we</p> <p>19 get a copy of that maybe faxed here so that I could look</p> <p>20 at it and maybe ask some questions about it this</p> <p>21 afternoon if in fact you have submitted that?</p> <p>22 MR. THOMPSON: Do you want to take a break right</p> <p>23 now?</p> <p>24 MR. WALCZAK: Why don't we --</p> <p>25 MR. THOMPSON: If we wait -- we can go some more</p>	<p>1 A Some of the others.</p> <p>2 Q And which experts were you responding to?</p> <p>3 A Specifically, Doctors Alters and Padian. Is that</p> <p>4 how -- is that how he pronounces his name?</p> <p>5 Q And generally -- we'll come back to this when we get the</p> <p>6 report, but generally, what did you say in this -- what</p> <p>7 are your further opinions that are advanced in that</p> <p>8 report?</p> <p>9 A They were pretty consistent with the things that I</p> <p>10 already talked about in my first report, the idea that</p> <p>11 in this case, this policy is telling students that -- or</p> <p>12 raising awareness amongst students that theories -- or</p> <p>13 that evolution is a theory rather than a fact, and that</p> <p>14 that's consistent with the National Science Education</p> <p>15 Standards, for example, the course text and so forth, so</p> <p>16 it's not something that the School Board conjured up,</p> <p>17 that it was consistent with other sources.</p> <p>18 It talked about how the idea of raising awareness</p> <p>19 of alternatives again is consistent with things within</p> <p>20 the National Science Education Standards, also</p> <p>21 consistent with other actions around the country that</p> <p>22 are at the center of different discussions and debates</p> <p>23 around the country.</p> <p>24 Also talked about the idea that critical thinking,</p> <p>25 again, is consistent with the National Science Education</p>
Page 35	Page 37
<p>1 and then I'll call the office and do that.</p> <p>2 MR. WALCZAK: Let's do that. Do you object if I</p> <p>3 ask him about the scope of the rebuttal?</p> <p>4 MR. THOMPSON: See, I don't know if they even</p> <p>5 submitted the rebuttal, so that's the question I -- you</p> <p>6 might want to wait for me to make the call. If they</p> <p>7 have in fact submitted a rebuttal, then I don't have any</p> <p>8 problems with you asking him questions about the</p> <p>9 rebuttal.</p> <p>10 MR. WALCZAK: I think it makes senses, let's take</p> <p>11 five minutes.</p> <p>12 (Discussion held off the record.)</p> <p>13 BY MR. WALCZAK:</p> <p>14 Q So you were asked to prepare a rebuttal report. A</p> <p>15 rebuttal to what?</p> <p>16 A They didn't specify specific points, they just merely</p> <p>17 said from based on what you've read, could you prepare a</p> <p>18 rebuttal.</p> <p>19 Q And what do you mean, read what, the --</p> <p>20 A Expert reports.</p> <p>21 Q -- expert depositions?</p> <p>22 A Expert reports.</p> <p>23 Q I'm sorry, expert reports.</p> <p>24 So were you responding to Ken Miller or were you</p> <p>25 responding to some of the other experts?</p>	<p>1 Standards. And then finally -- and then that's where I</p> <p>2 introduced the discussion around Sober and Steel and</p> <p>3 Penny, Hendy, and Poole. And then finally talked about</p> <p>4 the idea that evolution is what's being taught in the</p> <p>5 classroom.</p> <p>6 Q What do you mean by that?</p> <p>7 A Meaning that's the focus of the biology class, it's</p> <p>8 consistent with state standards that they're teaching</p> <p>9 evolution, I mean, that's what the students are</p> <p>10 learning, that's what they're being tested on and so</p> <p>11 forth.</p> <p>12 Q So what's the point of the policy?</p> <p>13 A The point of the policy is to, again, help students</p> <p>14 understand that evolution is a developing theory, the</p> <p>15 National Science Education Standards call it incomplete,</p> <p>16 that's the word that they use, helping the students to</p> <p>17 understand that it's a developing, incomplete theory.</p> <p>18 Number two, encouraging students to think critically</p> <p>19 about what they're learning, help them to assume some</p> <p>20 ownership over what they're learning. So that's the</p> <p>21 idea.</p> <p>22 Q Did you read all of the National Science Education</p> <p>23 Standards?</p> <p>24 A Correct.</p> <p>25 Q From start to finish?</p>

10 (Pages 34 to 37)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 38</p> <p>1 A From introduction to Chapter 6 or whatever it was.</p> <p>2 Q Is that the first time you've read them?</p> <p>3 A It's the first time I've read them all the way through.</p> <p>4 Q And do you know what they said, if they said anything,</p> <p>5 about teaching intelligent design?</p> <p>6 A They did not.</p> <p>7 Q Did they say anything about teaching creationism?</p> <p>8 A They did not. Well, they might have said something</p> <p>9 about creationism. I'd have to go back and look.</p> <p>10 Q Did they say that -- so they didn't mention intelligent</p> <p>11 design?</p> <p>12 A No.</p> <p>13 Q So they didn't say that introducing students to</p> <p>14 intelligent design was something that's appropriate?</p> <p>15 A No.</p> <p>16 Q So you looked at the National Science Education</p> <p>17 Standards, Sober and Steel, Pezary, Hendy, and Poole.</p> <p>18 Sounds like a law firm.</p> <p>19 Anything else you looked at?</p> <p>20 A I mentioned a couple of newspaper articles.</p> <p>21 Q Did you consult with anybody for the second report?</p> <p>22 A No.</p> <p>23 Q Except the lawyers for Thomas Moore Law Center?</p> <p>24 A Well, other than they asked me to do it, that was it.</p> <p>25 Q Did you talk to any of your colleagues in the education</p>	<p style="text-align: right;">Page 40</p> <p>1 A "The whole theory" meaning?</p> <p>2 Q Well, the theory of intelligent design?</p> <p>3 A A familiarity, yes. Certainly not an expertise.</p> <p>4 Q And your familiarity is based on having read Michael</p> <p>5 Behe's expert report?</p> <p>6 A Well, you had asked me earlier what I had read in</p> <p>7 relation to this report.</p> <p>8 Q Right. Have you read anything else about intelligent</p> <p>9 design besides Michael Behe's report?</p> <p>10 A Just in life?</p> <p>11 Q Yeah.</p> <p>12 A Yes, certainly.</p> <p>13 Q What are the most important things you've read about</p> <p>14 intelligent design?</p> <p>15 A I don't know if I'd classify them as most important, but</p> <p>16 I've read articles talking about the controversy,</p> <p>17 talking about the issue as it's unfolded in Ohio, for</p> <p>18 example, and now as it's unfolding in Kansas, and so</p> <p>19 articles related to that, for example.</p> <p>20 Q So those would be news articles?</p> <p>21 A Some news articles, some magazine articles.</p> <p>22 Q Have you read any articles or books about intelligent</p> <p>23 design theory?</p> <p>24 A You mean kind of in-depth?</p> <p>25 Q Yes.</p>
<p style="text-align: right;">Page 39</p> <p>1 field?</p> <p>2 A No.</p> <p>3 Q I want to talk about the literature that you either</p> <p>4 reviewed or are aware of, starting with the literature</p> <p>5 that supports intelligent design. I know you've</p> <p>6 mentioned you had read Professor Behe's expert report,</p> <p>7 correct?</p> <p>8 A Yes.</p> <p>9 Q What other literature did you read that supports</p> <p>10 intelligent design?</p> <p>11 A That was it.</p> <p>12 Q Ever?</p> <p>13 A Ever? Certainly not ever.</p> <p>14 Q Tell me what are the most important books or articles</p> <p>15 about intelligent design?</p> <p>16 A In existence?</p> <p>17 Q Um-hmm.</p> <p>18 A Well, there were articles about intelligent design that</p> <p>19 were referenced in one of the expert reports.</p> <p>20 Q Have you read these?</p> <p>21 A Those -- are you asking me those that I've read? Oh,</p> <p>22 I'm sorry, no, I did not read those that were referenced</p> <p>23 in that report, no.</p> <p>24 Q So would you say that you're familiar with the whole</p> <p>25 theory of intelligent design?</p>	<p style="text-align: right;">Page 41</p> <p>1 A No.</p> <p>2 Q So the only thing you've read that kind of explains</p> <p>3 intelligent design itself as opposed to the controversy</p> <p>4 is Michael Behe's expert report that he submitted in</p> <p>5 this case?</p> <p>6 A Well, I mean, the other articles in reading about the</p> <p>7 issue of evolution versus intelligent design and so</p> <p>8 forth, inevitably, they have to define what is</p> <p>9 intelligent design and so forth.</p> <p>10 MR. THOMPSON: This is not an objection, but I just</p> <p>11 wanted to get clear in my own mind the scope of the</p> <p>12 question, because I think earlier Dick Carpenter</p> <p>13 mentioned that he read all of the expert reports, and</p> <p>14 most, if not all of those expert reports discussed</p> <p>15 intelligent design, and now he's focussed on just</p> <p>16 Michael Behe. I just want to make sure the record is</p> <p>17 clear on that. He's read all of the expert reports and</p> <p>18 those reports also talk about intelligent design.</p> <p>19 Is that accurate?</p> <p>20 THE WITNESS: Yeah.</p> <p>21 MR. THOMPSON: Okay. I sort of kind of missed that</p> <p>22 point.</p> <p>23 MR. WALCZAK: Fair enough.</p> <p>24 BY MR. WALCZAK:</p> <p>25 Q And I have a series of questions like this I'm going to</p>

11 (Pages 38 to 41)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 42</p> <p>1 ask you about different topics, but let me just say that</p> <p>2 I'm asking about books or articles that you have read</p> <p>3 any time, already understanding that you have read all</p> <p>4 of the expert reports. So I'm looking for other stuff.</p> <p>5 So is it fair to say that the Behe report in this</p> <p>6 case is probably the most authoritative thing you've</p> <p>7 read discussing intelligent design theory?</p> <p>8 A Authoritative? How are you defining "authoritative"?</p> <p>9 Q Is that the article that you think best explains</p> <p>10 intelligent design?</p> <p>11 A I don't know if I'd say best explains. I mean, there</p> <p>12 are others that seem to explain it just as effectively.</p> <p>13 Q Such as?</p> <p>14 A I recall some years ago reading an article by a</p> <p>15 gentleman by the name of Mark Hartwig who discusses the</p> <p>16 issue of intelligent design.</p> <p>17 Q Was that in a Focus on the Family publication?</p> <p>18 A No, I think that was something he had written elsewhere.</p> <p>19 Q What did you learn from that?</p> <p>20 A Just an understanding of what intelligent design is,</p> <p>21 what it is not.</p> <p>22 Q Let me ask you, what have you read that criticizes</p> <p>23 intelligent design?</p> <p>24 A Well, certainly the expert reports would be included in</p> <p>25 those.</p>	<p style="text-align: right;">Page 44</p> <p>1 were in peer-reviewed publications.</p> <p>2 Q And do you remember what any of those were?</p> <p>3 A No.</p> <p>4 Q And do you consider them reliable?</p> <p>5 A "Reliable" meaning?</p> <p>6 Q Good sources, good arguments?</p> <p>7 A The sources -- if you're talking about the sources, the</p> <p>8 sources are credible, certainly.</p> <p>9 Q The source is credible.</p> <p>10 Did you consider the arguments to be credible?</p> <p>11 A Do you mean credible as in --</p> <p>12 Q Do they make sense?</p> <p>13 A Well, certainly they were clear, yes.</p> <p>14 Q They were clear. Did they make sense to you?</p> <p>15 A Make sense, does that mean I agreed with them or --</p> <p>16 Q Yes.</p> <p>17 A That doesn't necessarily mean that I agreed with them,</p> <p>18 but certainly, they were clear.</p> <p>19 Q Do you personally believe in intelligent design?</p> <p>20 A "Personally believe," how do you define that?</p> <p>21 Q Do you believe in intelligent design?</p> <p>22 A I guess I -- the word I'm keying on is not "intelligent</p> <p>23 design," it's "belief."</p> <p>24 What do you mean by "belief"?</p> <p>25 Q Do you personally -- some people believe in evolution,</p>
<p style="text-align: right;">Page 43</p> <p>1 Q And that would be the plaintiffs' expert reports?</p> <p>2 A Correct. Yeah, thank you. Thank you for clarifying.</p> <p>3 Q I was wondering if I missed something in there.</p> <p>4 Anything else you've read that criticizes</p> <p>5 intelligent design?</p> <p>6 A Again, when you're reading about the controversy or the</p> <p>7 debate or discussion, however you want to classify it,</p> <p>8 inevitably you'll read different perspectives or I've</p> <p>9 read different perspectives amongst those, as well.</p> <p>10 Q Have you read articles that would be more scientific</p> <p>11 that address, let's say, gaps and problems with</p> <p>12 intelligent design theory?</p> <p>13 A By scientific, do you mean peer-reviewed, is that what</p> <p>14 you mean?</p> <p>15 Q Sure, yeah.</p> <p>16 A No, I wouldn't classify what I read as peer review.</p> <p>17 Q As not peer review?</p> <p>18 A Correct, I would not classify them as peer review.</p> <p>19 Q Have you read any articles by scientists criticizing</p> <p>20 intelligent design?</p> <p>21 A Correct, I would say they were scientists. They work in</p> <p>22 the science community.</p> <p>23 Q So you have read articles by scientists criticizing</p> <p>24 intelligent design?</p> <p>25 A Right, but that doesn't necessarily denote that they</p>	<p style="text-align: right;">Page 45</p> <p>1 some people believe in intelligent design, some people</p> <p>2 believe in Raelism.</p> <p>3 What do you believe?</p> <p>4 MR. THOMPSON: I mean, that's a pretty general</p> <p>5 question. Again, can you rephrase it to a specific</p> <p>6 point?</p> <p>7 BY MR. WALCZAK:</p> <p>8 Q Let me just ask you.</p> <p>9 Do you believe in evolution?</p> <p>10 A What part of evolution?</p> <p>11 Q Why don't you tell me what you believe about evolution?</p> <p>12 A Okay. If you're asking me do I believe in change over</p> <p>13 time, there certainly seems to be evidence of change</p> <p>14 over time in lots of different areas, science,</p> <p>15 sociology, et cetera, et cetera.</p> <p>16 Q Do you believe in descent with modification?</p> <p>17 A What kind of modification?</p> <p>18 Q Well, it's a scientific term.</p> <p>19 Do you believe in natural selection?</p> <p>20 A I guess I'm still coming back to "belief." Do you</p> <p>21 mean -- how are you defining "belief," I guess?</p> <p>22 Q What views do you hold about how we got here today, what</p> <p>23 views do you hold on the origin of life?</p> <p>24 A I guess the best way to define my beliefs would be to</p> <p>25 say it is a bit of an open question at this point.</p>

12 (Pages 42 to 45)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 46</p> <p>1 Q Open between what, what are the -- what are the things</p> <p>2 that you're open about?</p> <p>3 A Meaning somebody would say, as you had said, do you</p> <p>4 believe in this or how did we come to be? Often my</p> <p>5 answer is I don't know. I don't know.</p> <p>6 Q Do you believe in God?</p> <p>7 A The existence of God? Certainly.</p> <p>8 Q Do you believe God created the universe?</p> <p>9 (Deposition interrupted.)</p> <p>10 MR. WALCZAK: Would you read back the last</p> <p>11 question?</p> <p>12 (Record repeated.)</p> <p>13 A That is consistent with my faith system, yes.</p> <p>14 BY MR. WALCZAK:</p> <p>15 Q And when did God do that, approximately?</p> <p>16 A I have no idea.</p> <p>17 Q How old do you think the earth is?</p> <p>18 A Again, I don't know.</p> <p>19 Q What does your faith system tell you?</p> <p>20 A My faith system doesn't necessarily say.</p> <p>21 Q Doesn't necessarily say. Does it say at all?</p> <p>22 A No.</p> <p>23 Q I don't want to get into your personal religious</p> <p>24 beliefs. Let me just ask you what -- do you go to</p> <p>25 church? I mean, what is your faith?</p>	<p style="text-align: right;">Page 48</p> <p>1 Q Do you dispute the occurrence of evolution?</p> <p>2 MR. THOMPSON: Objection here because I think he's</p> <p>3 raised a good point. There's several different aspects</p> <p>4 of evolution and that question is misleading, so I would</p> <p>5 object as being vague and misleading and ambiguous.</p> <p>6 BY MR. WALCZAK:</p> <p>7 Q If I ask you to define evolution, how would you do that?</p> <p>8 A Well, I think in the most general sense, one could</p> <p>9 define evolution as change over time.</p> <p>10 Q Do you know what I'm talking about when I say micro and</p> <p>11 macroevolution?</p> <p>12 A Correct, yes.</p> <p>13 Q And so what is microevolution?</p> <p>14 A Genetic change within a species.</p> <p>15 Q And what is macroevolution?</p> <p>16 A The development of new species from a different</p> <p>17 ancestor, for example.</p> <p>18 Q Do you believe in microevolution?</p> <p>19 A I don't mean to equivocate, but believe in?</p> <p>20 Q Do you think that microevolution occurs?</p> <p>21 A Do I think it does? Do I think in a professional sense,</p> <p>22 in a personal sense, in a religious sense?</p> <p>23 Q How about professional?</p> <p>24 A I don't know that I could render an expert professional</p> <p>25 opinion on whether in fact it is a fact.</p>
<p style="text-align: right;">Page 47</p> <p>1 A In answer to your first question, yes, I do go to</p> <p>2 church. And the second would be typically classified as</p> <p>3 Christian.</p> <p>4 Q Is there a -- I mean, that's broad. Is there</p> <p>5 something --</p> <p>6 A Yeah, it is broad, that's why I say typically</p> <p>7 classified.</p> <p>8 Q I mean, Presbyterian or Episcopalian?</p> <p>9 A No, I don't subscribe to a denomination.</p> <p>10 Q So you don't have any personal belief about how old the</p> <p>11 earth is?</p> <p>12 A Not necessarily.</p> <p>13 Q Well, do you -- well, not necessarily. Do you have any</p> <p>14 belief about how old the earth is?</p> <p>15 A No.</p> <p>16 Q Is that something you ever think about?</p> <p>17 A No, it isn't.</p> <p>18 (Deposition interrupted; discussion held off</p> <p>19 the record.)</p> <p>20 BY MR. WALCZAK:</p> <p>21 Q Do you believe that evolution actually took place or</p> <p>22 takes place? Do you believe in the fact of evolution,</p> <p>23 is evolution a fact?</p> <p>24 A Well, that seems to be the central issue here, but what</p> <p>25 part of evolution are you --</p>	<p style="text-align: right;">Page 49</p> <p>1 Q Why?</p> <p>2 A Because that's not my area of expertise.</p> <p>3 Q Well, you're here testifying that evolution -- that</p> <p>4 teaching gaps and problems with evolution is a good</p> <p>5 thing to do?</p> <p>6 A I'm here testifying to the fact that that is currently</p> <p>7 an issue within the scientific community and that</p> <p>8 students ought to be made aware of that.</p> <p>9 Q But you are -- you're not a scientist?</p> <p>10 A Correct. Not in the sense as we're defining it here.</p> <p>11 Q So do you professionally think that macroevolution takes</p> <p>12 place or took place or and is taking place?</p> <p>13 MR. THOMPSON: Objection. I think he made it clear</p> <p>14 that he is not a scientist and he doesn't want to render</p> <p>15 scientific opinions.</p> <p>16 BY MR. WALCZAK:</p> <p>17 Q Do you think the theory of gravity is a legitimate</p> <p>18 theory?</p> <p>19 MR. THOMPSON: I'd object to --</p> <p>20 BY MR. WALCZAK:</p> <p>21 Q Do you --</p> <p>22 MR. THOMPSON: The theory of gravity, whether it's</p> <p>23 a theory or a law, I don't know, but --</p> <p>24 BY MR. WALCZAK:</p> <p>25 Q The theory of relativity, do you quibble with the theory</p>

13 (Pages 46 to 49)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

Page 50	Page 52
<p>1 of relativity?</p> <p>2 A Again, I couldn't render a professional opinion about</p> <p>3 the theory of relativity.</p> <p>4 Q Because?</p> <p>5 A Because again, that's not my area of expertise.</p> <p>6 Q So you don't -- I mean, if I ask you to tell me what are</p> <p>7 the gaps and problems in evolution that Dover students</p> <p>8 should be taught, how would you answer that?</p> <p>9 A That within the evolutionary trail, if you will,</p> <p>10 particularly macroevolution, that there appear to be</p> <p>11 gaps between species, there's no ancestor or bridge</p> <p>12 across those gaps.</p> <p>13 Q And how do you know that?</p> <p>14 A From reading, again, about macroevolution,</p> <p>15 microevolution, and understanding what it is.</p> <p>16 Q And do you agree with that?</p> <p>17 A Do I agree with?</p> <p>18 Q That there are problems with macroevolution?</p> <p>19 A It appears to be so, that there appear to be these gaps,</p> <p>20 yes.</p> <p>21 Q But you don't have independent scientific expertise to</p> <p>22 evaluate that?</p> <p>23 A That's why I say it appears to be.</p> <p>24 Q So what is the basis for your saying that?</p> <p>25 A Again, in reading about the definitions of evolution,</p>	<p>1 about intelligent design and evolution here are the</p> <p>2 expert reports, the Sober and Steel article, and the law</p> <p>3 firm type sounding article, Penny, Hendy, and Poole. Is</p> <p>4 that kind of the universe of what you've looked at here</p> <p>5 in preparing these opinions?</p> <p>6 A Well, in preparing the report specifically.</p> <p>7 Q Had you ever studied evolution before you were asked to</p> <p>8 do this report?</p> <p>9 A Studied in what sense?</p> <p>10 Q Any sense.</p> <p>11 A Read about it? Certainly.</p> <p>12 Q Did you take classes in college, did you take biology</p> <p>13 classes in college?</p> <p>14 A Yes.</p> <p>15 Q During graduate work?</p> <p>16 A During undergraduate work.</p> <p>17 Q Were you taught intelligent design as an undergraduate?</p> <p>18 A I doubt it. I don't think so, let's put it that way.</p> <p>19 Q Can you identify any literature that would support the</p> <p>20 existence of macroevolution?</p> <p>21 A Ask the question again.</p> <p>22 Q Can you identify any literature that argues in favor of</p> <p>23 macroevolution happening?</p> <p>24 A Not necessarily, no.</p> <p>25 Q You can't?</p>
Page 51	Page 53
<p>1 reading about the issue, the debate, et cetera,</p> <p>2 et cetera.</p> <p>3 Q What literature can you point me to that you've read</p> <p>4 that raises these problems with macroevolution?</p> <p>5 A One of them was an article that I mentioned earlier by</p> <p>6 Sober and Steel.</p> <p>7 Q Anything else?</p> <p>8 A Certainly the expert reports on both sides.</p> <p>9 Q When you say both sides, what did you find in the</p> <p>10 plaintiffs' experts reports to support your opinion</p> <p>11 here?</p> <p>12 A They acknowledged that -- in talking about the</p> <p>13 controversy or debate or discussion or whatever you want</p> <p>14 to call it, they're kind of defining terms, this is what</p> <p>15 macroevolution is, when people talk about gaps, this is</p> <p>16 what they mean, so forth.</p> <p>17 Q And have you read literature that questions whether</p> <p>18 macroevolution occurred?</p> <p>19 A The one I mentioned earlier, Sober and Steel, for</p> <p>20 example, they're talking about this is an assumption, we</p> <p>21 ought to test this assumption, et cetera.</p> <p>22 Q Anything else?</p> <p>23 A Certainly articles that I've mentioned already that talk</p> <p>24 about the issue.</p> <p>25 Q So it seems to me kind of the universe of your knowledge</p>	<p>1 A Not off the top of my head.</p> <p>2 Q Have you read any?</p> <p>3 A Clearly, I mean, there are people out there, and I've</p> <p>4 probably read it in the course of my life, but I</p> <p>5 couldn't spout them, I haven't committed them to memory.</p> <p>6 Q Have you read any peer-reviewed literature that supports</p> <p>7 intelligent design?</p> <p>8 A No.</p> <p>9 Q Are you aware of any?</p> <p>10 A I'm aware of those that were highlighted in the expert</p> <p>11 report, or one of the expert reports.</p> <p>12 Q Whose report is that, do you remember?</p> <p>13 A I'm guessing it was Dembski's, but that's only a guess.</p> <p>14 Q You're not aware of any other peer-reviewed literature</p> <p>15 about intelligent design other than what's referenced in</p> <p>16 any of the expert reports?</p> <p>17 A Correct.</p> <p>18 Q Have you read any of the peer-reviewed literature that</p> <p>19 may be mentioned in those reports?</p> <p>20 A As I said earlier, no.</p> <p>21 Q Is peer review important?</p> <p>22 A It's important in some settings, yes.</p> <p>23 Q What settings is it important in?</p> <p>24 A It tends to be important in research communities.</p> <p>25 Q Why?</p>

14 (Pages 50 to 53)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 54</p> <p>1 A The idea in peer review is that your work is read and 2 reviewed by, in theory, a group of your peers, and that, 3 again, in theory, gives it a measure of credibility. 4 Q Besides credibility, does it do anything else? I mean, 5 I note that on your list of publications on the vita you 6 distinguish peer-reviewed from non-peer-reviewed? 7 A Correct. 8 Q So besides kind of the stamp of approval or whatever you 9 want to call it, credibility, what else does peer review 10 do? 11 A It's a — in some ways, for lack of a better word, it's 12 a service to the authors. 13 Q What service is that? 14 A In that when you're preparing work and you submit it to 15 a journal and it goes through this process, they give 16 you feedback on what you write, so the service that it 17 provides is that this feedback is designed to strengthen 18 your article. 19 Q And you're not aware of any peer-reviewed literature on 20 intelligent design other than what's been mentioned in 21 the expert reports? 22 A Correct. 23 Q And you haven't read any peer-reviewed literature on 24 intelligent design? 25 A Correct.</p>	<p style="text-align: right;">Page 56</p> <p>1 A Right, it's kind of an extension. 2 Q And do you know, does the National Academy of Science 3 have a position on the teaching of intelligent design? 4 A I think that was included in Alters' report, if I 5 remember correctly, but I'd have to go back and — 6 Q Well, do you know? Did you look at what the National 7 Academy of Science has said about the teaching of 8 intelligent design? 9 A Only in that I read it in the Alters report. 10 Q So you did not consult, other than the standards, you 11 did not consult the literature put out by the National 12 Academy of Science? 13 A Correct. 14 Q And that would apply either to the teaching of evolution 15 or intelligent design? 16 A Correct. 17 THE WITNESS: Could we take a break? 18 MR. WALCZAK: Please. 19 THE WITNESS: Thank you. 20 (Short recess.) 21 BY MR. WALCZAK: 22 Q Do you know if the National Academy of Science has taken 23 a position on the teaching of intelligent design? 24 A If it's included in the Alters report, then — 25 Q Well, I'm asking what you know.</p>
<p style="text-align: right;">Page 55</p> <p>1 Q Have you read any peer-reviewed literature on evolution? 2 A In life or in preparation for this report? 3 Q How about in preparation for this report? 4 A Not specifically, no. 5 Q In life? 6 A Inevitably, yes. 7 Q Do you remember what you've read? 8 A No. 9 Q What would you say are the most prestigious science 10 academies or societies in this country? 11 A Probably the National Academy of Sciences, that's one 12 that comes to mind immediately. 13 Q Can you name any others? 14 A I list a few in relation to the National Science 15 Education Standards. National Science Foundation, 16 National Research Council. 17 Q Did you consult the National Academy of Sciences' 18 literature in preparing — when I say "report" now, I'm 19 going to mean either report. Did you consult the 20 National Academy of Sciences' publications prior to 21 preparing your opinions? 22 A The National Science Education Standards are available 23 through the National Academy of Sciences through the 24 Academy Press, if that makes sense. 25 Q So it's an arm of the National Academy of Science?</p>	<p style="text-align: right;">Page 57</p> <p>1 A I'd have to consult the report to know for certain. 2 Q So what do you know as we sit here right now, does the 3 National Academy of Science support the teaching of 4 intelligent design? 5 A Again, I don't know for a fact, but I think there was a 6 position taken that was listed in the Alters report. 7 Q And what's that position? 8 A If I'm remembering correctly, I think their position was 9 they didn't necessarily endorse the teaching of 10 intelligent design. 11 Q Have you gone back and looked at the National Academy of 12 Science position since you read Dr. Alters' report? 13 A No. 14 Q Do you know whether the National Academy of Science has 15 taken a position on whether a student should be taught 16 that there are gaps and problems in evolution? 17 A I don't know. 18 Q Do you know whether the National Academy of Science has 19 taken a position on what you call the controversy in the 20 scientific community about intelligent design? 21 A I don't know. 22 Q Do you know whether the National Science Foundation has 23 taken a position on intelligent design? 24 A The same answer as I gave the National Academy of 25 Sciences.</p>

15 (Pages 54 to 57)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 58</p> <p>1 Q But that's not something you've consulted in rendering 2 your opinion?</p> <p>3 A Correct.</p> <p>4 Q And the National Research Council?</p> <p>5 A Correct, again, the same thing.</p> <p>6 Q When I say AAAS, do you know what that means? What does 7 that stand for?</p> <p>8 A I don't know.</p> <p>9 Q So you don't know what AAAS stands for?</p> <p>10 A Correct.</p> <p>11 Q How about the American Association for the Advancement 12 of Science, did you ever hear of them?</p> <p>13 A By name, yes.</p> <p>14 Q Did you look at whether they have any position on the 15 teaching of intelligent design?</p> <p>16 A No.</p> <p>17 Q Can you point me to any science foundations, academies, 18 societies that support the teaching of intelligent 19 design?</p> <p>20 A No.</p> <p>21 Q You cannot?</p> <p>22 A No.</p> <p>23 Q Did you consult any science education societies or 24 academies or organizations?</p> <p>25 A By consult?</p>	<p style="text-align: right;">Page 60</p> <p>1 A Are you asking me have I visited their web site?</p> <p>2 Q Yes.</p> <p>3 A Well, certainly I've visited their web site.</p> <p>4 Q And on their web site, they have various publications?</p> <p>5 A Um-hum. Correct, sorry.</p> <p>6 Q And they have a publication about the teaching of 7 evolution. Did -- I'm telling you they do.</p> <p>8 A Okay.</p> <p>9 Q Did you look at that publication?</p> <p>10 A Is there a specific publication? I mean, was there a 11 title to it?</p> <p>12 Q It's a publication about the teaching of evolution. 13 It's called The Teaching of Evolution.</p> <p>14 A Just as you said.</p> <p>15 Q Did you read that position statement?</p> <p>16 A No.</p> <p>17 Q Have you read it since you read Dr. Alters' report?</p> <p>18 A No.</p> <p>19 Q Have you read it ever?</p> <p>20 A No.</p> <p>21 Q So you don't know what position the National Science 22 Teachers Association takes on intelligent design?</p> <p>23 A Inasmuch as what was reported in the Alters report,</p> <p>24 Q But you don't know firsthand --</p> <p>25 A Correct.</p>
<p style="text-align: right;">Page 59</p> <p>1 Q Did you look to see what their positions were on the 2 teaching of intelligent design, on teaching gaps and 3 problems in evolution, or in discussing the so-called 4 controversy in the scientific community?</p> <p>5 A Inasmuch as the National Science Education Standards 6 were crafted, I guess, by members of various 7 organizations, some of which we've mentioned.</p> <p>8 Q Have you ever heard of NSTA?</p> <p>9 A National Science Teachers Association.</p> <p>10 Q Do you know if they have a position on the teaching of 11 evolution?</p> <p>12 A Again, only in what I read through the Alters report.</p> <p>13 Q So you didn't look at what the NSTA position was on the 14 teaching of evolution before preparing your opinions?</p> <p>15 A Other than reading what I read in the report, Alters' 16 report, of course, which was after my initial report.</p> <p>17 Q I thought they were contemporaneous.</p> <p>18 MR. WALCZAK: Your reports weren't due after ours.</p> <p>19 MR. THOMPSON: His report came in after, I think, 20 Alters' report.</p> <p>21 MR. WALCZAK: Ours went out on the deadline.</p> <p>22 MR. THOMPSON: I'm not positive.</p> <p>23 BY MR. WALCZAK:</p> <p>24 Q But you have not gone, for instance, to look at the NSTA 25 web site?</p>	<p style="text-align: right;">Page 61</p> <p>1 Q -- from having --.</p> <p>2 Is the National Science Teachers Association a 3 prestigious organization in your view?</p> <p>4 A Prestigious meaning?</p> <p>5 Q Is it a respected association?</p> <p>6 A Presumably.</p> <p>7 Q It's not somebody you work with in your line of work?</p> <p>8 A No.</p> <p>9 Q Are you familiar with the NABT?</p> <p>10 A National American -- or Association of Biology Teachers.</p> <p>11 Q Are you aware of whether they have taken an official 12 position on the teaching of intelligent design?</p> <p>13 A Not firsthand.</p> <p>14 Q They have a publication about the teaching of evolution. 15 Did you look at that publication?</p> <p>16 A No.</p> <p>17 Q Do you know what position the NABT takes about so-called 18 teaching the controversy?</p> <p>19 A I do not.</p> <p>20 Q Or teaching that there are gaps and problems with 21 evolution?</p> <p>22 A No.</p> <p>23 Q Can you point to any science education organizations, 24 societies, academies, that support the teaching of 25 intelligent design?</p>

16 (Pages 58 to 61)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 62</p> <p>1 A No.</p> <p>2 Q So every major science academy, foundation,</p> <p>3 organization, and every important science education</p> <p>4 organization opposes the teaching of intelligent design?</p> <p>5 MR. THOMPSON: Objection. A fact not in evidence.</p> <p>6 You used the word "every." We don't know if that</p> <p>7 includes every, just the ones that you've mentioned.</p> <p>8 BY MR. WALCZAK:</p> <p>9 Q Well, let me ask you.</p> <p>10 Please identify any science organizations,</p> <p>11 associations, academies that support the teaching of</p> <p>12 intelligent design?</p> <p>13 A Well, I think you already asked me that, and I said --</p> <p>14 Q And you couldn't?</p> <p>15 A Correct.</p> <p>16 Q And can you identify any science education</p> <p>17 organizations, associations, societies that support the</p> <p>18 teaching of intelligent design?</p> <p>19 A Again, isn't that the same question?</p> <p>20 Q No. One is science. Okay?</p> <p>21 A Okay. So you're saying a teaching association?</p> <p>22 Q Well, we talked at the beginning that there is this</p> <p>23 specialty in science education, the teaching of science?</p> <p>24 A Sure, I understand.</p> <p>25 Q So the first question is about --</p>	<p style="text-align: right;">Page 64</p> <p>1 educational goals.</p> <p>2 So exposing students to intelligent design is not</p> <p>3 supported by any of the science or science education</p> <p>4 academies, so how do you reconcile your opinion with</p> <p>5 their positions?</p> <p>6 A By "exposing to," how are you defining "exposing"?</p> <p>7 Q Well, let's talk about Dick Thompson says that they're</p> <p>8 not teaching intelligent design. What's your</p> <p>9 understanding of what they're doing with intelligent</p> <p>10 design in Dover?</p> <p>11 A My understanding is based on what we have here in front</p> <p>12 of us in terms of the statement that's being read and so</p> <p>13 forth, that, number one, they're making students aware</p> <p>14 of the fact or the idea that evolution is a developing</p> <p>15 theory, not a fact or a law. Number two, that there are</p> <p>16 other theories or ideas in discussion about it, and one</p> <p>17 of those is so identified as intelligent design. And</p> <p>18 number three, they're telling them that they could find</p> <p>19 more information about that in the library.</p> <p>20 Q And how are they exposing students to that?</p> <p>21 A My understanding is they have a statement that they read</p> <p>22 prior to the lessons on evolution.</p> <p>23 Q And who reads those?</p> <p>24 A Again, my understanding is it's the school principal or</p> <p>25 AP or somebody who works in the school.</p>
<p style="text-align: right;">Page 63</p> <p>1 A Broader.</p> <p>2 Q -- the scientists.</p> <p>3 A Sure, sure, sure.</p> <p>4 Q The other is about the science teachers.</p> <p>5 A The sub-discipline, correct.</p> <p>6 Q Right.</p> <p>7 A Gotcha.</p> <p>8 Q And you're not aware of any science education</p> <p>9 organization, societies, academies, that support the</p> <p>10 teaching of intelligent design?</p> <p>11 A Correct.</p> <p>12 Q Now, given that you are in this case opining that</p> <p>13 schools should teach intelligent design or that teaching</p> <p>14 intelligent design is good pedagogically, how do you</p> <p>15 reconcile your opinion --</p> <p>16 MR. THOMPSON: Objection. He has never opined that</p> <p>17 teaching intelligent design is good pedagogy. That's</p> <p>18 not the policy.</p> <p>19 MR. WALCZAK: We're going to come back to that.</p> <p>20 BY MR. WALCZAK:</p> <p>21 Q You have opined that teaching problems and gaps in the</p> <p>22 theory of evolution, making students aware of</p> <p>23 alternative theories such as intelligent design, and</p> <p>24 making resources available to students to pursue</p> <p>25 independent inquiry promotes legitimate pedagogical and</p>	<p style="text-align: right;">Page 65</p> <p>1 Q And do you know how it actually was implemented in</p> <p>2 January, do you know what happened?</p> <p>3 A Again, I'm just -- from what I've been told --</p> <p>4 Q Was it that you know about what happened in January?</p> <p>5 A Presuming you're talking about that's when the statement</p> <p>6 was read to the students?</p> <p>7 Q Do you know?</p> <p>8 A I was told that a statement was read to the students</p> <p>9 prior to the evolutionary lessons.</p> <p>10 Q And who told you that?</p> <p>11 A The counsel for the defense.</p> <p>12 Q Have you talked to any of the teachers in this case?</p> <p>13 A No.</p> <p>14 Q Have you talked to any of the School Board members?</p> <p>15 A No.</p> <p>16 Q Have you talked to any of the Dover administrators?</p> <p>17 A No.</p> <p>18 Q Have you talked to any Dover parents?</p> <p>19 A No.</p> <p>20 Q Have you talked to any Dover students?</p> <p>21 A No.</p> <p>22 Q Have you ever been to Dover?</p> <p>23 A No.</p> <p>24 Q You're really missing out.</p> <p>25 So if a teacher or administrator stands up at the</p>

17 (Pages 62 to 65)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 66</p> <p>1 front of the class and reads this four-paragraph</p> <p>2 statement, is that teaching?</p> <p>3 A Not in the classic definition of teaching.</p> <p>4 Q What's the classic definition of teaching?</p> <p>5 A It would be that there is some systematic, deliberate,</p> <p>6 coordinated effort, if you will, to instruct students</p> <p>7 about X.</p> <p>8 Q And so what would go into that systematic, deliberate</p> <p>9 effort?</p> <p>10 A There would be a printed, slash, published curriculum</p> <p>11 approved by the School Board and those who work within</p> <p>12 the school. That the curriculum is implemented by the</p> <p>13 instructional staff, teachers, aides, whomever. That</p> <p>14 there is -- or that there are assessments aligned with</p> <p>15 that instruction. And in our age of state standards,</p> <p>16 that that instruction is aligned with state standards</p> <p>17 and that it would prepare students to complete the state</p> <p>18 assessments.</p> <p>19 Q So what part of what Dover is doing doesn't satisfy the</p> <p>20 systematic, deliberate effort?</p> <p>21 A Well, the students aren't tested on it in either the</p> <p>22 classroom or the school, they're not tested on it in the</p> <p>23 state assessments. It's not something that's woven into</p> <p>24 the school curriculum.</p> <p>25 Q It's in the school curriculum.</p>	<p style="text-align: right;">Page 68</p> <p>1 MR. THOMPSON: Objection. He was responding to</p> <p>2 your question as to what he meant by teaching, not in</p> <p>3 constructing a curriculum, but what does teaching mean,</p> <p>4 the definition of teaching, and now you're asking him a</p> <p>5 different question, how would you construct a</p> <p>6 curriculum.</p> <p>7 BY MR. WALCZAK:</p> <p>8 Q Certainly I'm not trying to mislead you, and if I'm</p> <p>9 confusing, I apologize.</p> <p>10 To construct a unit on any topic or to teach</p> <p>11 students whatever the School Board decides to teach,</p> <p>12 presumably there's a right way and a wrong way or a</p> <p>13 better way and a worse way?</p> <p>14 A I go back to the word, I think, that kind of got us down</p> <p>15 this trail, and that was the classic definition of</p> <p>16 teaching. There are multiple understandings of teaching</p> <p>17 and learning, so that's --</p> <p>18 Q Of what?</p> <p>19 A Teaching and learning.</p> <p>20 Q Teaching and learning?</p> <p>21 A Yeah.</p> <p>22 Q Okay.</p> <p>23 A So when I say "classical definition," that's kind of</p> <p>24 what I was describing, is a classical definition of</p> <p>25 teaching.</p>
<p style="text-align: right;">Page 67</p> <p>1 A That's why I'm saying it's not woven into the school</p> <p>2 curriculum.</p> <p>3 Q What does "woven into" mean?</p> <p>4 A Well, the ideal in the school curriculum is that you</p> <p>5 start from an end, whatever your end is, objectives,</p> <p>6 what is it you want the students to know and be able to</p> <p>7 do, and that you work backwards from there, and that</p> <p>8 throughout your lessons, your units in your lessons,</p> <p>9 that you're designing very specific, systematic</p> <p>10 activities and instruction to help students know and be</p> <p>11 able to do whatever it is that you've identified in your</p> <p>12 objectives and state standards, presumably.</p> <p>13 Q So if you don't do those things, then is that good</p> <p>14 teaching?</p> <p>15 A If you don't do the things that I just mentioned?</p> <p>16 Q Yeah. Is that good pedagogy to --</p> <p>17 A Yeah, I think I understand your question. I think I</p> <p>18 understand it. Are you saying the omission of something</p> <p>19 is bad pedagogy?</p> <p>20 Q Well, as I understand it, it's woven into the</p> <p>21 curriculum, it's done by instructional staff, there are</p> <p>22 assessments, it's aligned with standards, it's tested,</p> <p>23 and it directly correlates with some objective.</p> <p>24 So that's how you would properly construct a</p> <p>25 curriculum?</p>	<p style="text-align: right;">Page 69</p> <p>1 Q And did it include the components that I just mentioned?</p> <p>2 A Correct.</p> <p>3 Q Any others?</p> <p>4 A Well, there's now -- I don't want to make it seem as if</p> <p>5 it's just within the past year, within some years, the</p> <p>6 past some years, there's been discussion around shifting</p> <p>7 from this classical definition of teaching to encourage</p> <p>8 more ownership amongst students in their learning.</p> <p>9 Q Is this the constructivist school that --</p> <p>10 A Correct, right, yes, correct. So now there's a lot of</p> <p>11 discussion about how does one, recognizing that we live</p> <p>12 in this kind of standards world, how does a school</p> <p>13 balance what we've done for years and years with a more</p> <p>14 contemporary understanding of wouldn't it be nice to do</p> <p>15 this. Does that make sense? So anyway.</p> <p>16 Q So you say what Dover is doing with intelligent design</p> <p>17 is not the classic definition of teaching.</p> <p>18 Is it some form of teaching?</p> <p>19 A I would classify it more as some form of learning.</p> <p>20 That's why I said teaching and learning.</p> <p>21 Q Explain that. You're getting the idea of what a</p> <p>22 deposition is like?</p> <p>23 A No, I'm just thinking about what my classroom is like.</p> <p>24 Q Are your students really learning anything,</p> <p>25 Mr. Carpenter?</p>

18 (Pages 66 to 69)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 70</p> <p>1 A That is the critical question for any teacher, honestly.</p> <p>2 For years it's -- we've thought about what we do in the</p> <p>3 classroom as what a teacher says and does and so on and</p> <p>4 so forth, but the critical question has always been does</p> <p>5 that equal learning and is it the same as learning. So</p> <p>6 now there's contemporary discussion that kind of</p> <p>7 separates one from the other, and not separates them as</p> <p>8 in a complete isolation, but as in kind of defining one</p> <p>9 from the other and understanding that teaching doesn't</p> <p>10 always produce learning and learning doesn't always</p> <p>11 result from direct teaching.</p> <p>12 Does that make sense?</p> <p>13 Q Yeah, but if -- I mean, a teacher has some stature in</p> <p>14 the classroom and probably regardless of the classroom,</p> <p>15 right, regardless of the grade or the school?</p> <p>16 A In most cases.</p> <p>17 Q Unless the teacher has completely lost control?</p> <p>18 A Right.</p> <p>19 Q Ideally, the teacher has some stature?</p> <p>20 A Right.</p> <p>21 Q And if the teacher passes gas repeatedly, is that</p> <p>22 something that the students would learn from? Or</p> <p>23 hopefully not?</p> <p>24 A Potentially.</p> <p>25 Q What the teacher does in the classroom is something that</p>	<p style="text-align: right;">Page 72</p> <p>1 teaching as much as they are just instructions.</p> <p>2 Q Directions such as go to the blackboard?</p> <p>3 A Go to the blackboard, get --</p> <p>4 Q Sit down?</p> <p>5 A -- a pencil, right.</p> <p>6 Q Is the four-paragraph statement read during classroom,</p> <p>7 is that instructional?</p> <p>8 A It's instructionally -- yeah, it's motivated by</p> <p>9 instruction, I suppose, is what it's --</p> <p>10 Q So it's motivated to do what?</p> <p>11 A Well, as we talked about before, it's motivated to,</p> <p>12 number one, raise some awareness amongst the students</p> <p>13 about the nature of evolution. Number two, encourage</p> <p>14 them to think critically about what they're going to</p> <p>15 hear over the next X number of lessons. Number three,</p> <p>16 encourages them to explore this further on their own.</p> <p>17 And that's where I was trying to draw a delineation</p> <p>18 between teaching and learning.</p> <p>19 Q So are students in the Dover School District learning</p> <p>20 about the information conveyed in this four-paragraph</p> <p>21 statement?</p> <p>22 A What they're learning -- I mean, presumably they could,</p> <p>23 yes, they're encouraged to learn about that by going and</p> <p>24 reading about it further.</p> <p>25 Q I mean, the goal of this policy presumably is to</p>
<p style="text-align: right;">Page 71</p> <p>1 students would -- at least some students would observe?</p> <p>2 A They would observe it.</p> <p>3 Q And they might learn from that?</p> <p>4 A Potentially.</p> <p>5 Q And certainly what a teacher says in the classroom</p> <p>6 students might learn from?</p> <p>7 A Presumably.</p> <p>8 Q And if a teacher really would not want students to learn</p> <p>9 something, should he or she ever say that in a</p> <p>10 classroom?</p> <p>11 A If they don't want students to learn something?</p> <p>12 Q Right. I mean, anything that the teacher says the</p> <p>13 students could potentially learn from, is that a fair</p> <p>14 assumption?</p> <p>15 A I don't know if I'd say "anything."</p> <p>16 Q What could a teacher say that a student wouldn't learn</p> <p>17 from?</p> <p>18 A In the course of a day, teachers say all kinds of</p> <p>19 things, both that are related to instruction and not,</p> <p>20 and potentially a teacher might talk about something</p> <p>21 that's not instructionally related that students</p> <p>22 discount or ignore or don't necessarily cognate.</p> <p>23 Q Can you give me an example of something that's</p> <p>24 instructionally related that wouldn't be teaching?</p> <p>25 A Directions in a classroom aren't necessarily always</p>	<p style="text-align: right;">Page 73</p> <p>1 transmit the information in these four paragraphs to the</p> <p>2 students?</p> <p>3 A Right.</p> <p>4 Q And so the goal is to teach students that there is an</p> <p>5 alternative to evolution known as intelligent design?</p> <p>6 MR. THOMPSON: Objection. Again you're using the</p> <p>7 word "teach," and we've defined teach in a totally</p> <p>8 different way than what you're talking about now.</p> <p>9 BY MR. WALCZAK:</p> <p>10 Q Well, I'd like you to answer that question.</p> <p>11 So is it not safe to say that the goal of this</p> <p>12 policy is to teach students that there is an alternative</p> <p>13 to evolution known as intelligent design?</p> <p>14 A I think it's fair to say that the goal, if we can take</p> <p>15 it at face value, is to encourage students to learn as</p> <p>16 much as possible about this thing that we're talking</p> <p>17 about here.</p> <p>18 Q About intelligent design?</p> <p>19 A No, not necessarily. Not limited to intelligent design,</p> <p>20 no.</p> <p>21 Q Intelligent design and evolution?</p> <p>22 A Certainly evolution, that's the focus of the class, is</p> <p>23 that's what the students are going through in a</p> <p>24 systematic fashion, but also that they would understand</p> <p>25 that it's an incomplete, developing theory, and that</p>

19 (Pages 70 to 73)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 74</p> <p>1 there are other alternatives that are discussed within</p> <p>2 the science community and --</p> <p>3 Q So will you agree that a goal of this policy is that</p> <p>4 students learn what is read to them in these four</p> <p>5 paragraphs?</p> <p>6 MR. THOMPSON: Objection. Again, it's conflicting</p> <p>7 with the policy itself, the question that you've asked.</p> <p>8 MR. WALCZAK: How is that?</p> <p>9 MR. THOMPSON: The policy itself says that no</p> <p>10 teacher will teach intelligent design, creationism, or</p> <p>11 present his or her or the Board's religious beliefs.</p> <p>12 MR. WALCZAK: That's fine, I --</p> <p>13 MR. THOMPSON: That's the goal. The goal is not to</p> <p>14 teach intelligent design.</p> <p>15 MR. WALCZAK: That's what the Board says.</p> <p>16 BY MR. WALCZAK:</p> <p>17 Q If this four-paragraph statement is read to students by</p> <p>18 either a teacher or a principal, would it make any sense</p> <p>19 to read it if you didn't want the students to learn</p> <p>20 that?</p> <p>21 A To learn what?</p> <p>22 Q What's read to them?</p> <p>23 A If by learning you mean understand what they're saying,</p> <p>24 well, obviously, the goal is that the students would</p> <p>25 understand what they're saying, but that doesn't</p>	<p style="text-align: right;">Page 76</p> <p>1 A That is a goal and an expectation.</p> <p>2 Q And would you want to teach things that you did not</p> <p>3 expect or hope that students would take ownership of?</p> <p>4 A There are things that are taught every day that students</p> <p>5 don't necessarily take ownership of.</p> <p>6 Q But would you teach something where that was not a goal</p> <p>7 and an expectation?</p> <p>8 A I mean, realistically, yeah, that does happen.</p> <p>9 Q Like what, give me an example?</p> <p>10 A In my class, I may talk about certain concepts or ideas</p> <p>11 that I know students aren't going to be tested on. In</p> <p>12 my case, I deal with graduate students, so I'm always</p> <p>13 cognizant of the fact that as adult learners, they're</p> <p>14 always thinking about how am I going to use this</p> <p>15 tomorrow in my classroom or next week or next month. So</p> <p>16 I know that there are times that we'll talk about things</p> <p>17 in my class that are not going to apply immediately and</p> <p>18 maybe even ever, so I'm not necessarily expecting them</p> <p>19 to be able to apply -- learn it to a point of being able</p> <p>20 to apply it.</p> <p>21 Q So what's the point of introducing them to it?</p> <p>22 A Well, number one, that whatever it is we're talking</p> <p>23 about, it's a -- it's something that may be related to</p> <p>24 something else that we're talking about and so it kind</p> <p>25 of plays a part of understanding whatever it is.</p>
<p style="text-align: right;">Page 75</p> <p>1 necessarily mean that the goal is that students -- the</p> <p>2 goal isn't necessarily to teach intelligent design.</p> <p>3 Q What is it?</p> <p>4 A It's pretty self-evident. The goal is that students</p> <p>5 would, as it says here, understand that it's a</p> <p>6 developing theory.</p> <p>7 Q So "understand," is that --</p> <p>8 MR. THOMPSON: Evolution is a developing theory.</p> <p>9 THE WITNESS: Yes. Well, intelligent design --</p> <p>10 BY MR. WALCZAK:</p> <p>11 Q Isn't learning another -- a synonym for understanding?</p> <p>12 A Not necessarily.</p> <p>13 Q You want students to know these things, right, is that a</p> <p>14 goal of the policy, for students to know that this --</p> <p>15 A You want them to understand what they're saying, what</p> <p>16 they're -- you want students to cognitively understand</p> <p>17 what is being read to them.</p> <p>18 Q And that's different than learning?</p> <p>19 A Potentially, yes.</p> <p>20 Q How?</p> <p>21 A Just because I understand something that is said doesn't</p> <p>22 necessarily mean that I take ownership over what's</p> <p>23 contained within it.</p> <p>24 Q If you teach something, do you expect that students will</p> <p>25 take ownership of it, is that a goal?</p>	<p style="text-align: right;">Page 77</p> <p>1 Q So you've made some judgment that this is important</p> <p>2 enough for you to take class time on?</p> <p>3 A Well, yeah, but that doesn't necessarily -- we're</p> <p>4 getting at this point of does that necessarily equal</p> <p>5 learning.</p> <p>6 Q We must have just very different understandings of what</p> <p>7 learning -- so is learning different than understanding?</p> <p>8 Learning is the process?</p> <p>9 A I would put it the other way, understanding is different</p> <p>10 than learning.</p> <p>11 Q Okay. Explain.</p> <p>12 A Well, specifically here, if I read this four-paragraph</p> <p>13 statement to you, I would hope you would understand what</p> <p>14 it is I'm saying. Right? The message is conveyed and</p> <p>15 received. But that doesn't necessarily mean that I</p> <p>16 expect that as a result of what I've read and what</p> <p>17 you've heard that some learning is, has, or will take</p> <p>18 place.</p> <p>19 Q But it's likely to take place?</p> <p>20 MR. THOMPSON: Objection, no foundation for that.</p> <p>21 MR. WALCZAK: Well, I'm asking him.</p> <p>22 BY MR. WALCZAK:</p> <p>23 Q Is it likely to take place?</p> <p>24 A That's a huge speculation.</p> <p>25 Q Well, if I was a teacher and I stood up at the front of</p>

20 (Pages 74 to 77)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 78</p> <p>1 the classroom and I said homosexuality is a biological</p> <p>2 trait and people are born that way and so that's -- they</p> <p>3 really can't change, would I be teaching?</p> <p>4 A Potentially.</p> <p>5 Q Why?</p> <p>6 A Presumably you have a motivation in mind in saying such.</p> <p>7 It's not a direction, if that makes sense.</p> <p>8 Q No, that doesn't make sense.</p> <p>9 A Meaning go to the blackboard, pick up your pencil.</p> <p>10 Q Is that any different than the four-paragraph statement</p> <p>11 in Dover? I mean, substantively, of course it's</p> <p>12 different, but is that any different than this statement</p> <p>13 here?</p> <p>14 A I would classify this more as direction or instruction,</p> <p>15 or directions rather than teaching. Instructions in the</p> <p>16 sense that we were talking about earlier, pick up your</p> <p>17 pencil, go to the blackboard.</p> <p>18 Q Because Darwin's theory is a theory, it is still being</p> <p>19 tested as new evidence is discovered, the theory is not</p> <p>20 a fact. Gaps in the theory exist for which there is no</p> <p>21 evidence. A theory is -- blah, blah, blah. Intelligent</p> <p>22 design is an explanation of the origin of life that</p> <p>23 differs from Darwin's view. The reference book Of</p> <p>24 Pandas and People is available for any student to see if</p> <p>25 you would like to explore this view in an effort to gain</p>	<p style="text-align: right;">Page 80</p> <p>1 mean, they don't even talk about what intelligent design</p> <p>2 is other than to say it's an alternative theory, they</p> <p>3 don't even explain it.</p> <p>4 BY MR. WALCZAK:</p> <p>5 Q Do you know what the goal of the policy is?</p> <p>6 A Are you asking me was I in -- or am I privy to School</p> <p>7 Board discussions and so forth?</p> <p>8 Q Do you as we sit here right now know what the School</p> <p>9 Board's goal was in passing this policy?</p> <p>10 A That's what I'm asking, are you asking me was I -- am I</p> <p>11 privy to the discussion that precipitated this policy?</p> <p>12 Q Well, we'll start there.</p> <p>13 A Okay. No, I was not privy to what premeditated it.</p> <p>14 Q Have you talked to anybody within the School District</p> <p>15 about the goal for this policy?</p> <p>16 A No.</p> <p>17 Q Has anybody told you what the goal of the policy is?</p> <p>18 A No.</p> <p>19 Q So in your report when you talk about how this policy</p> <p>20 promotes critical thinking and raises student awareness,</p> <p>21 you don't know that that was the Board's goal?</p> <p>22 A Not necessarily.</p> <p>23 Q But if you in your report opine that this policy will</p> <p>24 raise student awareness, introduce students to the idea</p> <p>25 of multiple ways of knowing, establish critical</p>
<p style="text-align: right;">Page 79</p> <p>1 an understanding of what intelligent design actually</p> <p>2 involves.</p> <p>3 So if I read a statement that said, "Homosexuality</p> <p>4 has biological origins. Now, there is another view that</p> <p>5 in fact homosexuality is not biological, there is a book</p> <p>6 that you could read about this in the library," if I</p> <p>7 said that at the beginning of class, is that teaching?</p> <p>8 A I'd say that's more of an admonition and encouragement.</p> <p>9 Q And what's the admonition or encouragement?</p> <p>10 A The admonition is to try to encourage students to learn</p> <p>11 about this presumably on their own if you're telling</p> <p>12 them to go to the library and get a book and so forth.</p> <p>13 Q And is that any different than what Dover is doing?</p> <p>14 A That's what I'm saying, this is more of an admonition,</p> <p>15 an instruction.</p> <p>16 Q And is it reasonable to expect that students will learn</p> <p>17 this?</p> <p>18 A Reasonable to expect?</p> <p>19 Q Is it reasonable to expect that -- well, you wouldn't</p> <p>20 say it if you wouldn't expect students to hear it,</p> <p>21 right? And upon hearing it, they're going to process it</p> <p>22 in some way?</p> <p>23 MR. THOMPSON: I object again. This is far afield,</p> <p>24 this is speculation as to what some student is going to</p> <p>25 do with that particular four-paragraph statement. I</p>	<p style="text-align: right;">Page 81</p> <p>1 thinking, have students assume more responsibility for</p> <p>2 their learning, teach them something that is a simple</p> <p>3 matter of accuracy, that there are weaknesses, gaps, and</p> <p>4 problems, then that must be what this policy does, or</p> <p>5 are you not saying the policy does those things?</p> <p>6 A So what are you asking exactly?</p> <p>7 Q So you do not know what the Board's goal is in teaching</p> <p>8 this?</p> <p>9 MR. THOMPSON: That's been asked and answered. He</p> <p>10 says he doesn't know, he's --</p> <p>11 MR. WALCZAK: He does not know.</p> <p>12 MR. THOMPSON: Right.</p> <p>13 BY MR. WALCZAK:</p> <p>14 Q So you do not know that a goal is to promote critical</p> <p>15 thinking?</p> <p>16 MR. THOMPSON: He doesn't -- objection again. I</p> <p>17 think it's getting confusing here. He knows -- he's</p> <p>18 looked at the policy, and he says these, based upon the</p> <p>19 factual reading of the policy, these are the laudable</p> <p>20 goals of that policy. He doesn't know what the</p> <p>21 motivation of the Board was to pass it. The distinction</p> <p>22 is what was in the mind of the board members when they</p> <p>23 passed it. He doesn't know that. But he can look at</p> <p>24 the face of the policy and say these are laudable</p> <p>25 pedagogical goals, there's no inconsistency there.</p>

21 (Pages 78 to 81)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 82</p> <p>1 BY MR. WALCZAK:</p> <p>2 Q So you're inferring what the goals might be?</p> <p>3 MR. THOMPSON: Objection. Again, he can't answer,</p> <p>4 it's pure speculation as to what was in the minds --</p> <p>5 MR. WALCZAK: That's not what I'm asking.</p> <p>6 BY MR. WALCZAK:</p> <p>7 Q So you're inferring what -- your report essentially</p> <p>8 infers the District's goals?</p> <p>9 MR. THOMPSON: Objection again.</p> <p>10 BY MR. WALCZAK:</p> <p>11 Q Go ahead, you can answer that.</p> <p>12 A I'm looking at the policy and thinking about it and</p> <p>13 analyzing it based on what I read both in the policy and</p> <p>14 those sources that we've talked about outside of, and</p> <p>15 then as I do with any policy, I'm looking at the policy</p> <p>16 on its face and what's incentivized by it and so forth,</p> <p>17 not necessarily who motivate -- who was motivated and</p> <p>18 why they were motivated by it and so forth. All I can</p> <p>19 know is what I see there. And then analyze it.</p> <p>20 Q So how does reading this four-paragraph statement</p> <p>21 promote critical thinking?</p> <p>22 A As stated, it says with respect to any theory, students</p> <p>23 are encouraged to keep an open mind. So starting from</p> <p>24 that point, the idea is that in any learning, in this</p> <p>25 case with respect to the theory of evolution, students</p>	<p style="text-align: right;">Page 84</p> <p>1 Q And does it direct the students to any alternatives?</p> <p>2 A The policy -- the referenced statement itself directs</p> <p>3 them to a book. It says there are alternatives, but it</p> <p>4 references one in particular.</p> <p>5 Q Does it reference an alternative theory?</p> <p>6 A By name, yes.</p> <p>7 Q So does this promote critical thinking about intelligent</p> <p>8 design?</p> <p>9 A It promotes critical thinking about several things</p> <p>10 generally, but also several things, as well, specific to</p> <p>11 the science classroom.</p> <p>12 Q Does it promote critical thinking about intelligent</p> <p>13 design?</p> <p>14 A Presumably, yes.</p> <p>15 Q Does it promote critical thinking --</p> <p>16 A Hold on, I want to go back. I wouldn't say promote as</p> <p>17 much as I would say encourage.</p> <p>18 Q But it encourages critical thinking about intelligent</p> <p>19 design?</p> <p>20 A And evolution and theories and science and so forth.</p> <p>21 Q Do you know whether the Miller and Levine textbook</p> <p>22 encourages any of the aforementioned critical thinking</p> <p>23 areas?</p> <p>24 A Meaning do they have a chapter on critical thinking?</p> <p>25 Q Do they in the Miller and Levine textbook, do they</p>
<p style="text-align: right;">Page 83</p> <p>1 are instructed to keep an open mind about what they</p> <p>2 hear, to analyze it, to weigh evidence one against the</p> <p>3 other or weigh multiple types of data, to think</p> <p>4 critically about that, and come to some conclusion.</p> <p>5 Q What about the rest of -- so that sentence --</p> <p>6 A That's what I'm saying, with that as a starting point,</p> <p>7 and the rest of it kind of dovetails in with that.</p> <p>8 Q So how else does -- so the only way this promotes</p> <p>9 critical thinking is by telling students to keep an open</p> <p>10 mind?</p> <p>11 A No, that's not what I'm saying. I'm saying from that</p> <p>12 point for -- not literally forward, but also the idea it</p> <p>13 says theories are tested as new evidence is discovered,</p> <p>14 so it's again telling students, encouraging students to</p> <p>15 keep in mind that this is a theory, that as scientists</p> <p>16 do, that you need to test this, weigh the evidence,.....</p> <p>17 weigh the data and so forth.</p> <p>18 Q What else does it promote critical thinking on?</p> <p>19 A Critical thinking also -- a part of critical thinking is</p> <p>20 that tying in with this idea of owning your learning,</p> <p>21 that students or learners would consider multiple</p> <p>22 definitions and understandings and explanations, if you</p> <p>23 will, so it is encouraging students to consider that</p> <p>24 there may be alternatives, to weigh the alternatives and</p> <p>25 so forth.</p>	<p style="text-align: right;">Page 85</p> <p>1 promote critical thinking about evolution, about what a</p> <p>2 scientific theory is? Do you know what Miller and</p> <p>3 Levine says about those things?</p> <p>4 A Implicitly, yes.</p> <p>5 Q What do you mean, implicitly?</p> <p>6 A The fact that they have this page in their text that</p> <p>7 talks about the developing nature of evolution.</p> <p>8 Q What was that -- I'm sorry, what was that page?</p> <p>9 A 386.</p> <p>10 Q And what did that page talk about?</p> <p>11 A Well, I'd have to pull it up.</p> <p>12 Q Oh, it's on your computer.</p> <p>13 A Which I can if we want to wait.</p> <p>14 Q Maybe we can do that later.</p> <p>15 A Actually, I think I may have -- oh, here. This is</p> <p>16 quoting from the text: Like any scientific theory,</p> <p>17 evolutionary theory continues to change as new data are</p> <p>18 gathered and new ways of thinking arise. Researchers</p> <p>19 still debate such important questions as precisely how</p> <p>20 new species arise and why species become extinct. There</p> <p>21 is also uncertainty about how life began.</p> <p>22 Q And so how is the statement that Dover reads different</p> <p>23 than what's in the book already? I mean, it sounds to</p> <p>24 me pretty similar.</p> <p>25 A Um-hmm. I'm sorry, yes.</p>

22 (Pages 82 to 85)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 86</p> <p>1 Q So what does the Dover statement add to what's already 2 in the book?</p> <p>3 MR. THOMPSON: Objection. You're assuming that 4 that section, that page, is covered in the text -- in 5 the lessons that the teachers give, because I know that 6 they don't -- excuse me -- I understood that they don't 7 teach the whole book.</p> <p>8 BY MR. WALCZAK:</p> <p>9 Q Do you know what they teach?</p> <p>10 A From the book?</p> <p>11 Q Um-hmm.</p> <p>12 A Not from the book, no.</p> <p>13 Q Assuming they teach that, is this policy not redundant, 14 this statement?</p> <p>15 A That assumes -- let's assume that for a moment. That 16 would assume redundancy is a bad thing.</p> <p>17 Q Well, is it -- assuming that is taught, is the statement 18 duplicative without any value judgments?</p> <p>19 MR. THOMPSON: The documents speak for themselves. 20 The text speaks -- states one thing and the policy 21 states, again, something else.</p> <p>22 MR. WALCZAK: Well, in terms of the concepts that 23 Dr. Carpenter has pointed to that we're encouraging 24 critical thinking about.</p> <p>25 BY MR. WALCZAK:</p>	<p style="text-align: right;">Page 88</p> <p>1 Then it has various, kind of going back to what we 2 were talking about earlier, instructions, admonitions, 3 so forth.</p> <p>4 Q About discussions with parents?</p> <p>5 A Correct.</p> <p>6 Q So do we need to promote critical thinking about 7 students being tested on evolution, is that something 8 you need to promote critical thinking about?</p> <p>9 A That's what I'm saying, there is some of that that's 10 admonition or instruction.</p> <p>11 Q So the only thing that I heard you say, and correct me 12 if I'm wrong, the only thing I heard you say that this 13 statement adds to what is already in Miller and Levine 14 is to encourage critical thinking about intelligent 15 design?</p> <p>16 A Are you saying that Miller and Levine aren't encouraging 17 critical thinking?</p> <p>18 Q I'm saying they are encouraging critical thinking about 19 different things.</p> <p>20 A Implicitly.</p> <p>21 Q Well, and that's the only page you've read in the book, 22 right?</p> <p>23 A Specific to this.</p> <p>24 Q Specific to --</p> <p>25 A The issue of critical thinking.</p>
<p style="text-align: right;">Page 87</p> <p>1 Q Isn't that duplicative, isn't the Miller and Levine 2 textbook chapter, assuming it's taught, duplicative of 3 the statement that the Board has required the school to 4 read to students?</p> <p>5 MR. THOMPSON: The text doesn't say anything about 6 a fact, that the theory is not a fact.</p> <p>7 MR. WALCZAK: You know what? I'm asking him the 8 questions.</p> <p>9 MR. THOMPSON: I know, but the two documents speak 10 for themselves.</p> <p>11 MR. WALCZAK: Well, you know, can he answer the 12 questions?</p> <p>13 A They are not exact representations one of the other, if 14 that's what you're asking.</p> <p>15 BY MR. WALCZAK:</p> <p>16 Q So what's different? What does the Dover statement add 17 to the Miller and Levine lesson plan?</p> <p>18 A Well, number one, it says that students are going to 19 learn -- or students will be taught and will be tested 20 on evolution specifically. That's not in the Miller and 21 Levine. This statement talks about -- talks a bit more 22 about what a theory is. This statement talks about 23 issues around alternatives, in the Dover statement.</p> <p>24 Q What alternatives?</p> <p>25 A Well, what it lists here, intelligent design.</p>	<p style="text-align: right;">Page 89</p> <p>1 Q What other pages have you read in Miller and Levine?</p> <p>2 A As I mentioned, I just skimmed through the text.</p> <p>3 Q But you haven't read it?</p> <p>4 A No, not read it as in a verbatim --</p> <p>5 Q Have you read the chapter on the science of biology?</p> <p>6 A No.</p> <p>7 Q That's Chapter 1.</p> <p>8 A Um-hmm.</p> <p>9 Q So you don't know what it is that Miller and Levine 10 actually teaches about biology?</p> <p>11 A As I said, I only skimmed through it just to get an 12 understanding.</p> <p>13 Q And what was your understanding about what it says on 14 encouraging critical thinking about scientific theories?</p> <p>15 A My understanding is that's not a central focus of the 16 book necessarily.</p> <p>17 Q And what is that understanding based on?</p> <p>18 A In looking at the table of contents and so forth.</p> <p>19 Q From the table of contents?</p> <p>20 A Right.</p> <p>21 Q But you have no idea what the book says about critical 22 thinking other than from that page?</p> <p>23 A Correct.</p> <p>24 Q So the big addition of this reading this statement to 25 the students is that it encourages students to think</p>

23 (Pages 86 to 89)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 90</p> <p>1 critically about intelligent design?</p> <p>2 A That's one of the things addressed in the statement.</p> <p>3 Q And I can tell you that there's no mention of</p> <p>4 intelligent design in the Miller and Levine textbook,</p> <p>5 you can just take my word for it.</p> <p>6 So this statement does introduce students to a new</p> <p>7 concept of intelligent design, is that correct?</p> <p>8 A If I'm -- if what you said is true.</p> <p>9 Q If it's not in Miller and Levine, then this is</p> <p>10 introducing a new concept to them?</p> <p>11 A Potentially. We don't know. I mean, they may have</p> <p>12 already known about it from somewhere else.</p> <p>13 Q But now they will definitely know about it, right?</p> <p>14 A Well, they'll -- know in what sense?</p> <p>15 Q They'll definitely know about the concept of intelligent</p> <p>16 design?</p> <p>17 MR. THOMPSON: Objection, that's speculation. We</p> <p>18 don't know if they even hear the statement or if it even</p> <p>19 registers. It would be a historical fact that after</p> <p>20 you've read this statement whether they really know</p> <p>21 anything about intelligent design.</p> <p>22 BY MR. WALCZAK:</p> <p>23 Q Would it make sense to have passed this without having</p> <p>24 the hope and expectation that students would now</p> <p>25 recognize that there is an alternative theory to</p>	<p style="text-align: right;">Page 92</p> <p>1 Q This kind of understanding about this concept of</p> <p>2 intelligent design?</p> <p>3 A Are you asking me does it promote intelligent design?</p> <p>4 Q Does it encourage students to think critically about</p> <p>5 intelligent design?</p> <p>6 A Well, first it encourages students to think critically,</p> <p>7 period. And to think critically about what they're</p> <p>8 going to read and hear. And then presumably, if they go</p> <p>9 and read a text in the library, to think critically</p> <p>10 about what they read there.</p> <p>11 Q Does it encourage the students to read that text?</p> <p>12 A It makes them aware of the text.</p> <p>13 Q And do teachers often make references to things that</p> <p>14 they don't want students to do? Would you identify,</p> <p>15 say, extra reading material without some hope and</p> <p>16 expectation that at least some students would take</p> <p>17 advantage of that?</p> <p>18 A I do it all the time.</p> <p>19 Q Without any hope and expectation that students will take</p> <p>20 advantage of it?</p> <p>21 A Exactly.</p> <p>22 Q Why do you do it?</p> <p>23 A As I tell the students in class, the reason I include</p> <p>24 bibliographies and other readings on a syllabus or</p> <p>25 reference them in class is if you are interested in</p>
<p style="text-align: right;">Page 91</p> <p>1 Darwin's called intelligent design, would it have made</p> <p>2 sense for the School Board to have passed that policy?</p> <p>3 A Would it have made sense for them to pass the policy --</p> <p>4 Q Unless they had the hope and expectation that students</p> <p>5 would come to understand that intelligent design is an</p> <p>6 alternative explanation to Darwin's theory?</p> <p>7 A That there are alternatives, one of them being</p> <p>8 intelligent design?</p> <p>9 Q Yes.</p> <p>10 A Presumably. I don't know because I haven't -- I wasn't</p> <p>11 there, I haven't had discussions with them.</p> <p>12 Q But from a pedagogical sense, it wouldn't make sense,</p> <p>13 would it?</p> <p>14 A Make sense to what?</p> <p>15 Q Be a sensible thing to do? Is that a pedagogically</p> <p>16 valid -- would you pass a policy identifying some</p> <p>17 concept that you're going to share with the students</p> <p>18 without having the hope and expectation that students</p> <p>19 would learn or understand or at least be aware of it?</p> <p>20 A Presumably the idea is here that students would</p> <p>21 understand, cognitively understand that there are</p> <p>22 alternatives to what they are going to hear over the</p> <p>23 next X lessons.</p> <p>24 Q And presumably, this statement promotes that?</p> <p>25 A Promotes what?</p>	<p style="text-align: right;">Page 93</p> <p>1 this, this is where you may find more information about</p> <p>2 X, Y and Z, but the reaction of the students make it</p> <p>3 very clear that we all know that they're not going to</p> <p>4 necessarily go out and do extra reading and so forth.</p> <p>5 Q Is there some implicit value judgment that you transmit</p> <p>6 to the students by making that statement?</p> <p>7 A Not necessarily. It's a service that I provide.</p> <p>8 Q So there's no implicit message that this would be a good</p> <p>9 thing for you to do?</p> <p>10 A I say very explicitly in class that I think students</p> <p>11 ought to read very broadly, that they ought to read,</p> <p>12 number one, and then number two, read very broadly</p> <p>13 outside of their discipline and outside of their own</p> <p>14 kind of sub-discipline, so forth. But beyond that,</p> <p>15 that's about as explicit as I get. I provide those</p> <p>16 things as a service.</p> <p>17 Q Have you talked to any, quote, unquote, experts on</p> <p>18 intelligent design?</p> <p>19 A "Talked to," what does that mean?</p> <p>20 Q Spoken with?</p> <p>21 A In preparation for the report and so forth?</p> <p>22 Q Ever.</p> <p>23 A Ever?</p> <p>24 Q Ever.</p> <p>25 A I'm hesitating over the word "expert."</p>

24 (Pages 90 to 93)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 94</p> <p>1 Q Let me narrow it. About intelligent design. I mean, if</p> <p>2 you said hello to Michael Behe, then that doesn't count,</p> <p>3 but talked to a self-proclaimed expert on intelligent</p> <p>4 design about the theory of intelligent design?</p> <p>5 A I want to say no, but I don't want that to --</p> <p>6 Q Not that you can remember?</p> <p>7 A Yeah, right. I'm not here to commit perjury, but no, I</p> <p>8 think.</p> <p>9 Q Have you ever attended any conferences where intelligent</p> <p>10 design was discussed?</p> <p>11 A No.</p> <p>12 Q Have you ever attended any conferences where evolution</p> <p>13 was discussed?</p> <p>14 A No, not that I remember.</p> <p>15 Q Have you ever attended any science conferences?</p> <p>16 A "Science" meaning?</p> <p>17 Q Science.</p> <p>18 A I think there are a whole lot of people who would debate</p> <p>19 you on what science is, but are you meaning what we're</p> <p>20 talking about here as science? As opposed to political</p> <p>21 science or economics or --</p> <p>22 Q What's your definition of science? ...</p> <p>23 A As I typically talk about it in class, I term it -- I</p> <p>24 put it in terms of research, is how does one define the</p> <p>25 nature of reality. So if we're talking about science</p>	<p style="text-align: right;">Page 96</p> <p>1 A Something like the American Education Research</p> <p>2 Association, for example, would have science education</p> <p>3 as a sub-discipline.</p> <p>4 Q And were you an attendee or a presenter?</p> <p>5 A Both.</p> <p>6 Q And how often have you attended those?</p> <p>7 A That specific one or other conferences of that nature?</p> <p>8 Q Well, American Educational Research Association?</p> <p>9 A I've gone to that one once.</p> <p>10 Q When was that?</p> <p>11 A April of 2004, I think.</p> <p>12 Q Last year?</p> <p>13 A I think. It could have been two years ago, but --</p> <p>14 Q Did you attend any programs that discussed science as</p> <p>15 we've defined it?</p> <p>16 A No.</p> <p>17 Q Did you present on any programs that discussed science?</p> <p>18 A As we define it, no.</p> <p>19 Q What did you present on?</p> <p>20 A Two things. One was on education policy. And the</p> <p>21 second one was on -- well, I guess they were both</p> <p>22 education policy related. One was on school discipline</p> <p>23 and one was on presidential education policy.</p> <p>24 Q Presidential educational policy?</p> <p>25 A Correct.</p>
<p style="text-align: right;">Page 95</p> <p>1 in -- kind of in this milieu, no.</p> <p>2 Q And how is this milieu different from your understanding</p> <p>3 of science?</p> <p>4 A What I'm saying is if you're talking about this milieu</p> <p>5 of science, this understanding of science, no, I haven't</p> <p>6 attended a conference --</p> <p>7 Q What understanding? I'm not sure -- I want to make sure</p> <p>8 we're on the same wavelength here.</p> <p>9 What's your understanding of the science that I'm</p> <p>10 asking about?</p> <p>11 A We're talking about biological science, that kind of --</p> <p>12 Q Not political science.</p> <p>13 A Not political science, not economics, not psychology --</p> <p>14 Q The natural sciences?</p> <p>15 A Yeah, I guess one could define it that way.</p> <p>16 Q Is that a fair definition?</p> <p>17 A I think that's the common --</p> <p>18 Q Biology, chemistry, physics, astronomy, geology,</p> <p>19 paleontology. Have you ever attended any science</p> <p>20 conferences as we've just defined that term?</p> <p>21 A No.</p> <p>22 Q Have you ever attended any science education</p> <p>23 conferences?</p> <p>24 A Not that they were specific to science education.</p> <p>25 Q So what -- well, tell me what you did attend?</p>	<p style="text-align: right;">Page 97</p> <p>1 Q Like the No Child Left Behind stuff?</p> <p>2 A Well, it wasn't that specifically, but in that kind of</p> <p>3 venue.</p> <p>4 Q So you didn't hear any discussion of science content as</p> <p>5 we've defined it?</p> <p>6 A Correct.</p> <p>7 Q Did you hear any discussion of intelligent design?</p> <p>8 A No.</p> <p>9 Q Any other science education type conferences that you've</p> <p>10 been to?</p> <p>11 A No.</p> <p>12 Q Do you know what, if any, instruction Dover School</p> <p>13 District has given teachers about what to do or not to</p> <p>14 do with this statement?</p> <p>15 A No.</p> <p>16 Q So you don't know if there's any limitations on the</p> <p>17 teachers, whether the school administration has placed</p> <p>18 any limitations on what teachers can and cannot say in</p> <p>19 addition to this statement?</p> <p>20 A Well, inasmuch as what it says here, no teacher will</p> <p>21 teach intelligent design, creationism, or present his or</p> <p>22 her or the Board's religious beliefs. So that seems to</p> <p>23 be pretty clear.</p> <p>24 Q Do you know whether the teachers have gotten any</p> <p>25 instructions about what they are supposed to do if they</p>

25 (Pages 94 to 97)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 98</p> <p>1 get a question about intelligent design?</p> <p>2 A No. Is it -- I didn't see it in here. Is it in here?</p> <p>3 Q I'm asking if you know.</p> <p>4 A Oh, no.</p> <p>5 Q Have you read any of the fact witnesses' depositions in</p> <p>6 this case?</p> <p>7 A What is that?</p> <p>8 Q You're an expert, Brian Alters is an expert, you are</p> <p>9 people who have some expertise in a field and are --</p> <p>10 A Rendering an opinion.</p> <p>11 Q Right, rendering an opinion. Fact witnesses are people</p> <p>12 who are players in --</p> <p>13 A Oh, those involved.</p> <p>14 Q -- the movie.</p> <p>15 A I see. No.</p> <p>16 Q Have you looked at anything related to the history of</p> <p>17 how this policy came into place?</p> <p>18 A Does that count the Complaint and the Answer?</p> <p>19 Q If that's -- I mean, have you looked at -- you've looked</p> <p>20 at the Complaint and the Answer?</p> <p>21 A Right.</p> <p>22 Q Have you looked at anything else?</p> <p>23 A No.</p> <p>24 Q Have you gone back and looked at news clips?</p> <p>25 A Not from this case.</p>	<p style="text-align: right;">Page 100</p> <p>1 A No.</p> <p>2 MR. WALCZAK: I'll tell you what. This is actually</p> <p>3 a good time for a break for me.</p> <p>4 (Deposition recessed for lunch at 12:22 p.m.)</p> <p>5 . . .</p> <p>6 (Deposition resumed at 1:13 p.m.)</p> <p>7 BY MR. WALCZAK:</p> <p>8 Q I have had a chance to scan your rebuttal report and I</p> <p>9 have a few questions about it. You talk about this</p> <p>10 controversy in the scientific -- inside and outside the</p> <p>11 scientific community.</p> <p>12 Now, other than Doctors Dembski, Minnich, and Behe,</p> <p>13 who else can you point to for the proposition that there</p> <p>14 is a debate in the, quote, scientific community?</p> <p>15 A Well, I quote a couple here, at least reference a couple</p> <p>16 here.</p> <p>17 Q And that would be the Steel, Sober and Steel?</p> <p>18 A The discussion amongst those folks.</p> <p>19 Q And so the universe of people who you took into account</p> <p>20 in this assessment are Behe, Minnich, Dembski, Sober and</p> <p>21 Steel? And Penny, Poole, the law firm --</p> <p>22 A Et al. And others that Dr. Behe, for example,</p> <p>23 references or others that reference -- that they</p> <p>24 reference.</p> <p>25 Q Did you read the reports that they reference?</p>
<p style="text-align: right;">Page 99</p> <p>1 Q Have you read Of Pandas and People?</p> <p>2 A The book itself?</p> <p>3 Q Yes.</p> <p>4 A No.</p> <p>5 Q So you haven't looked at a whole bunch of -- you haven't</p> <p>6 looked at a lot of literature either about intelligent</p> <p>7 design or evolution and you've mentioned a few things</p> <p>8 here and I want to go over those.</p> <p>9 You haven't consulted the science academies and</p> <p>10 societies except for the science education standards.</p> <p>11 You have not consulted science societies and academies</p> <p>12 or science education societies and academies. You</p> <p>13 haven't talked to any self-proclaimed experts about</p> <p>14 intelligent design. You haven't attended any</p> <p>15 conferences where intelligent design or evolution has</p> <p>16 been discussed.</p> <p>17 You have not talked to anybody in the School</p> <p>18 District?</p> <p>19 A Correct.</p> <p>20 Q You have not read fact witness depositions. You have</p> <p>21 not looked at the history of the passage of this policy</p> <p>22 other than it's referenced in the Answer or the</p> <p>23 Complaint.</p> <p>24 Did your counsel at any time instruct you not to do</p> <p>25 any of these things?</p>	<p style="text-align: right;">Page 101</p> <p>1 A Only inasmuch as what they included in their report.</p> <p>2 Q You didn't read the referenced-to reports?</p> <p>3 A Correct.</p> <p>4 Q So you don't have any independent knowledge --</p> <p>5 A Other than what -- Behe includes some of those in his</p> <p>6 report.</p> <p>7 Q And did you read those?</p> <p>8 A Correct.</p> <p>9 Q You did?</p> <p>10 A Yes.</p> <p>11 Q You're not aware of any other reports that -- beyond</p> <p>12 those that are mentioned in the Behe, Dembski, Minnich</p> <p>13 reports?</p> <p>14 A If you're asking me anything in addition to what we've</p> <p>15 already discussed, no.</p> <p>16 When we say "reports," are we including all of the</p> <p>17 expert witness reports other than what you and I just</p> <p>18 said?</p> <p>19 Q Yes.</p> <p>20 A Okay.</p> <p>21 Q So the debate in the scientific community about</p> <p>22 alternatives to evolution, including ID, what scientific</p> <p>23 community do you point to? Is it just these scientists</p> <p>24 who have submitted expert reports on behalf of the</p> <p>25 School District or are there other scientists?</p>

26 (Pages 98 to 101)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 102</p> <p>1 A And those that I reference here and others that they 2 reference, as well. 3 Q How would you define the scientific community? 4 A In this case, it would be those who are teaching and/or 5 researching in the field under question. 6 Q So that would be intelligent design? 7 A No, I would expand it beyond that. 8 Q What would you expand it to? 9 A When we say the scientific community, the community is 10 greater than those -- just those who are researching and 11 are teaching about intelligent design. 12 Q You've never attended any science conferences, so you 13 haven't heard any debate or discussion at a science 14 conference, right? 15 A Not firsthand. 16 Q Are you aware of any publication by the National Academy 17 of Science that talks about this controversy? 18 A By publication, do you mean -- 19 Q Well, anything that they put out or endorse or sponsor, 20 are you aware of any? 21 A I'd have to look into what I have on my laptop, but at 22 least one site that I visited, and this is under 23 question, which site was it, that's what I'm not 24 remembering, is it the National Association of Science 25 or is it the -- whatever else I visited, there were</p>	<p style="text-align: right;">Page 104</p> <p>1 ones. 2 Q Are you aware of any other than what may be referenced 3 in the other Dover Area School District's experts' 4 reports? 5 A No. 6 Q And you say IDT researchers have a clear scientific 7 research agenda. 8 What's your basis for saying that? 9 A Again, the expert report. 10 Q So you have no independent knowledge apart from what the 11 other experts have said? 12 A Correct. 13 Q You say IDT principles inform the work of research 14 scientists? 15 A Um-hmm. 16 Q What's your basis for saying that? 17 A The same sources. 18 Q So you have no independent knowledge about any of those 19 things? 20 A Correct. 21 Q Do you know if Sober and Steel's article is a 22 peer-reviewed article? 23 A I believe it is. 24 Q Do you know it is? 25 A The fact that it appears in a peer-reviewed journal</p>
<p style="text-align: right;">Page 103</p> <p>1 postings or web documents that referenced the 2 discussion, debate, controversy, however you want to 3 classify it. 4 Q And do you know what they said? 5 A They were -- it was essentially a publication about it 6 or a web posting about it, this is what's going on, kind 7 of a look at contemporary events. 8 Q When we take a break, I'm going to ask you to identify 9 that for me, okay? 10 A Okay. 11 Q We'll wait until we take a break. 12 Are you aware of any publications by AAAS that 13 recognize this controversy? 14 A No. 15 Q Are you aware of any publications within or emanating 16 from the National Science Teachers Association? 17 A Again, that may be the web site I'm referencing, but -- 18 Q So you can only think of one in all the things you 19 looked at that has referenced this controversy over 20 intelligent design? 21 A Um-hmm. I'm sorry, yes. 22 Q You say that intelligent design has been published in 23 peer-reviewed scientific journals. Can you identify 24 those? 25 A I'd have to look at the expert report to tell you which</p>	<p style="text-align: right;">Page 105</p> <p>1 would lead me to conclude that it is. 2 Q Evolution is just one scientific theory, correct? 3 A In the grand scheme of things? 4 Q Yeah. I mean, there's other scientific theories? 5 A And there are other -- and there are multiple ways of 6 understanding evolution, as well. 7 Q I'm just asking you, there are other scientific theories 8 besides the theory of evolution? 9 A Sure, yeah. 10 Q There's the theory of relativity, the theory of gravity, 11 the theory of plate tectonics, correct? 12 A Et cetera, right. 13 Q Are all of those theories subject to the same, shall we 14 say, admonition that they are being tested as new 15 evidence is discovered? 16 A Presumably, yes. 17 Q Well, yes or no? 18 A Presumably, yes. 19 Q Why do you say presumably? 20 A Because as -- because, as you read, as new data is 21 entered, discovered, or whatever. 22 Q Well, is that the definition of a scientific theory, 23 that it's constantly updated? 24 A In the real working world, that's typically how it 25 works.</p>

27 (Pages 102 to 105)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 106</p> <p>1 Q Define scientific theory for me?</p> <p>2 A Are you asking me is there a single scientific theory?</p> <p>3 Q How would you define scientific theory?</p> <p>4 A It's somewhat similar to what we talked about earlier,</p> <p>5 and that is a way to describe or define observed data</p> <p>6 and maybe not observed data.</p> <p>7 Q And does science as that term is commonly understood,</p> <p>8 does that limit how we can look at things?</p> <p>9 A Does it or should it, which are you asking me?</p> <p>10 Q I'm asking does it?</p> <p>11 MR. THOMPSON: I'll object. That's a pretty</p> <p>12 ambiguous and vague question. I don't know what the</p> <p>13 relevancy of it is.</p> <p>14 BY MR. WALCZAK:</p> <p>15 Q Go ahead.</p> <p>16 A Not necessarily.</p> <p>17 (Exhibit Number 2 was marked for identification.)</p> <p>18 BY MR. WALCZAK:</p> <p>19 Q I show you what's been marked as Exhibit 2.</p> <p>20 Do you recognize this?</p> <p>21 MR. THOMPSON: I need a magnifying glass here.</p> <p>22 MR. WALCZAK: I was anticipating that.</p> <p>23 BY MR. WALCZAK:</p> <p>24 Q If you turn to the last page, I have blown up a section</p> <p>25 of the first page.</p>	<p style="text-align: right;">Page 108</p> <p>1 Q Do you agree with this definition?</p> <p>2 A I agree that it is a definition.</p> <p>3 Q Is this a definition of science?</p> <p>4 MR. THOMPSON: He just answered the question, it is</p> <p>5 a definition of science.</p> <p>6 BY MR. WALCZAK:</p> <p>7 Q Give me another definition of science?</p> <p>8 A The reason I say it's a definition is it's a definition</p> <p>9 specific to a discipline.</p> <p>10 Q Okay. Which discipline?</p> <p>11 A When it says "the natural world," we're talking about</p> <p>12 what you and I defined earlier as the natural sciences,</p> <p>13 biology, chemistry, physics, et al.</p> <p>14 Q So you would say this is not a definition, but the</p> <p>15 definition as applied to the natural sciences?</p> <p>16 MR. THOMPSON: Objection, calls for a legal</p> <p>17 conclusion.</p> <p>18 MR. WALCZAK: You know what? This has nothing to</p> <p>19 do with legal conclusions.</p> <p>20 MR. THOMPSON: Sure it does.</p> <p>21 MR. WALCZAK: This is not a legal --</p> <p>22 MR. THOMPSON: Yes. The courts have defined what</p> <p>23 science is in the McLean case and that was Judge</p> <p>24 Overton's definition of what science is, and that's been</p> <p>25 disputed now, and ultimately, Judge Jones is going to</p>
<p style="text-align: right;">Page 107</p> <p>1 A It appears to be the course text or something looking</p> <p>2 like it.</p> <p>3 Q But you don't know for sure?</p> <p>4 A Well, based on what I see here, I assume -- it looks</p> <p>5 like the course text.</p> <p>6 Q Have you read this before?</p> <p>7 A As we talked about earlier, I would classify it more as</p> <p>8 a skim.</p> <p>9 Q I'd like you to take a minute and turn to that last</p> <p>10 page, and I have enlarged only the text that says "What</p> <p>11 is Science," and perhaps you could read what science is</p> <p>12 and is not to yourself and then tell me when you've</p> <p>13 finished doing that?</p> <p>14 A Okay.</p> <p>15 Q Do you agree with that definition of science?</p> <p>16 MR. THOMPSON: Objection. I think it's an</p> <p>17 ambiguous question. Can you get more particular as to</p> <p>18 what "that" means, "that definition"?</p> <p>19 BY MR. WALCZAK:</p> <p>20 Q You just read a definition in this exhibit. Do you</p> <p>21 agree with the definition that you just read?</p> <p>22 MR. THOMPSON: Objection, calls for a legal</p> <p>23 conclusion.</p> <p>24 MR. WALCZAK: Objection noted.</p> <p>25 BY MR. WALCZAK:</p>	<p style="text-align: right;">Page 109</p> <p>1 have to come to a decision as to what the definition of</p> <p>2 science is.</p> <p>3 MR. WALCZAK: But he's going to come to that</p> <p>4 conclusion with the aid of your expert and supposedly,</p> <p>5 you know, whether this is good pedagogy when we're</p> <p>6 talking about science education. I have every right to</p> <p>7 ask him about his understanding of the definition of</p> <p>8 science.</p> <p>9 MR. THOMPSON: Certainly you have a right to ask</p> <p>10 him, but the question is, is he qualified to respond.</p> <p>11 He is not a scientist, and these are questions for</p> <p>12 scientists, what is science.</p> <p>13 MR. WALCZAK: But he has opined that this is</p> <p>14 appropriate science education. So if he can't answer</p> <p>15 this, he can tell me that, but I think it's fair for me</p> <p>16 to assume that he should be able to answer this if he's</p> <p>17 opining on the material that's at issue here.</p> <p>18 MR. THOMPSON: And that is an ultimate conclusion</p> <p>19 that a judge is going to have to decide.</p> <p>20 MR. WALCZAK: That's fine.</p> <p>21 MR. THOMPSON: That's all I'm saying, is</p> <p>22 because -- okay. I don't want to --</p> <p>23 BY MR. WALCZAK:</p> <p>24 Q So you can still answer the question unless your counsel</p> <p>25 is going to instruct you not to.</p>

28 (Pages 106 to 109)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 110</p> <p>1 MR. THOMPSON: No, I mean, I just think it's</p> <p>2 important to note that you're asking him for a legal</p> <p>3 conclusion as to what is science. That's a part of the</p> <p>4 controversy that exists in this case.</p> <p>5 BY MR. WALCZAK:</p> <p>6 Q I want to know as you would define science, in your</p> <p>7 understanding of science and the understanding that you</p> <p>8 have brought to bear on your opinion, is this the</p> <p>9 definition of science, is this an accurate definition of</p> <p>10 science as applied to the natural sciences?</p> <p>11 A It is a definition of science applying to the natural</p> <p>12 sciences.</p> <p>13 Q Give me another definition, what would you add to this</p> <p>14 or how would you change this? I need the other -- I</p> <p>15 need alternative definitions of science if this isn't</p> <p>16 it.</p> <p>17 A There are some who work in the theoretical world of</p> <p>18 science, that is, they're unable to directly examine</p> <p>19 natural evidence and events and factors.</p> <p>20 Q And are these people scientists?</p> <p>21 A Most certainly.</p> <p>22 Q And give me examples of who those people are?</p> <p>23 A By name? Well, initially, Einstein was one. But</p> <p>24 contemporary, I'd have to -- I don't have them committed</p> <p>25 to memory. The String Theory might be one example.</p>	<p style="text-align: right;">Page 112</p> <p>1 Q No. I'm asking do you agree that science looks to</p> <p>2 explain things in the natural world?</p> <p>3 A That's one branch, slash, definition of science, yeah.</p> <p>4 Q What else would it look at, what's another definition?</p> <p>5 A Some scientists aren't concerned with the natural world.</p> <p>6 Q What are they concerned with?</p> <p>7 A Some scientists might be interested in the sociological,</p> <p>8 for instance.</p> <p>9 Q Sociological what?</p> <p>10 A Sociological interactions between people, sociologists,</p> <p>11 anthropologists, that kind of thing.</p> <p>12 Q Those would not be the natural sciences.</p> <p>13 In terms of the natural sciences, they are looking</p> <p>14 at explaining what's going on in the natural world,</p> <p>15 right?</p> <p>16 A Yes, I suppose so.</p> <p>17 Q But is it broader than that, are they looking to explain</p> <p>18 supernatural causes?</p> <p>19 A I don't know that I could say one way or the other.</p> <p>20 Q In your definition of science, does it allow for</p> <p>21 supernatural causation?</p> <p>22 A "Supernatural" defined as?</p> <p>23 Q Not of this world.</p> <p>24 A I mean, Jupiter is not of this world. I mean, what --</p> <p>25 Q A non-material explanation, a non-naturalistic</p>
<p style="text-align: right;">Page 111</p> <p>1 Q And how does this definition not apply? I mean, they're</p> <p>2 looking for natural causes of certain phenomena. I</p> <p>3 mean, Einstein was looking for natural causes of certain</p> <p>4 phenomena.</p> <p>5 A Correct.</p> <p>6 Q Is your dispute the natural causation aspect of this?</p> <p>7 A Well, that's implied in it in the sense -- that's</p> <p>8 implied, but more specifically to the idea</p> <p>9 of explanations that could be attested by examining</p> <p>10 evidence, for example. That implies that the students</p> <p>11 or the scientists would be able to examine evidence</p> <p>12 directly and weigh evidence one against the other and</p> <p>13 thereby theories one against the other, but somebody</p> <p>14 working in the world of the theoretical, unable to</p> <p>15 directly examine the evidence.</p> <p>16 Q Well, directly examine, do you mean -- if you're</p> <p>17 studying dinosaurs, you can't directly examine</p> <p>18 dinosaurs, but you're still looking for natural causes</p> <p>19 there?</p> <p>20 A Right.</p> <p>21 Q I guess I want to try to understand where the</p> <p>22 differences are here.</p> <p>23 Science is an explanation or is an attempt to</p> <p>24 explain the natural world, do you agree with that?</p> <p>25 A As they define it here?</p>	<p style="text-align: right;">Page 113</p> <p>1 explanation?</p> <p>2 A So your question is?</p> <p>3 Q Does science as commonly understood today allow for</p> <p>4 non-natural causation or supernatural causation?</p> <p>5 A That I don't know.</p> <p>6 Q You don't know?</p> <p>7 A No.</p> <p>8 Q Why?</p> <p>9 A Because I can't possibly know every person's and</p> <p>10 sub-discipline's understanding of the definition of</p> <p>11 science.</p> <p>12 Q So you say science may entail supernatural causation?</p> <p>13 A I'm saying I don't know, that's what I'm saying.</p> <p>14 Q Does your definition of science include the ability to</p> <p>15 test hypotheses?</p> <p>16 A Yes.</p> <p>17 Q So it's got -- whatever the hypothesis is, for it to be</p> <p>18 scientific, it must be testable?</p> <p>19 A What you said before was does it include the ability to</p> <p>20 test the hypothesis.</p> <p>21 Q Is an essential element of science testability?</p> <p>22 MR. THOMPSON: This is where my initial objections</p> <p>23 were, and that was Judge Overton had a definition of</p> <p>24 science in his case and that definition now has been a</p> <p>25 point of controversy, and so testability then becomes an</p>

29 (Pages 110 to 113)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 114</p> <p>1 issue that involves evolution, as well.</p> <p>2 MR. WALCZAK: Thank you.</p> <p>3 BY MR. WALCZAK:</p> <p>4 Q Is your understanding of your -- would your definition</p> <p>5 of science be that in order for a process to be</p> <p>6 scientific, it must be testable?</p> <p>7 A Some definitions of science, yes, and some, not</p> <p>8 necessarily.</p> <p>9 Q Can you name scientists who would say that it does not</p> <p>10 need to be testable in order to qualify as science?</p> <p>11 A Again, are we talking -- what realm of science?</p> <p>12 Q Natural sciences.</p> <p>13 A Okay, I'm sorry, I was talking outside of --</p> <p>14 Q Assume all of my questions are natural sciences.</p> <p>15 A Okay. Perhaps, but I don't know that. Again, I can't</p> <p>16 possibly know everyone's definition.</p> <p>17 Q Now, it's not okay to just teach students anything,</p> <p>18 correct?</p> <p>19 MR. THOMPSON: Objection, vague, ambiguous</p> <p>20 question.</p> <p>21 BY MR. WALCZAK:</p> <p>22 Q There are limits on -- there must be limits and</p> <p>23 standards on what should be taught to students?</p> <p>24 MR. THOMPSON: Again, same objection.</p> <p>25 BY MR. WALCZAK:</p>	<p style="text-align: right;">Page 116</p> <p>1 inaccurate to elucidate the accurate.</p> <p>2 Q Would you teach two plus two is five, would that be good</p> <p>3 pedagogy?</p> <p>4 A Going back to what I said before, you might present it</p> <p>5 in your teaching as a way to --</p> <p>6 Q No, but you said you might present two plus two does not</p> <p>7 equal five. I said would you teach students that two</p> <p>8 plus two equals five, would that be good pedagogy?</p> <p>9 A No, I think we would agree no.</p> <p>10 Q Why?</p> <p>11 A Because two plus two equals four.</p> <p>12 Q And so why would it be bad to teach students that two</p> <p>13 plus two is five?</p> <p>14 A I mean, I think we've already established that, it's not</p> <p>15 five.</p> <p>16 Q So it's because it's not accurate?</p> <p>17 A Because two plus two is four and not five.</p> <p>18 Q So two plus two equals five would be inaccurate, so it</p> <p>19 fails the test of good pedagogy because it's not</p> <p>20 accurate?</p> <p>21 A I don't know that it's an issue of pedagogy as much as</p> <p>22 it's accuracy versus inaccuracy.</p> <p>23 Q So accuracy is an element of good pedagogy?</p> <p>24 A It is an element.</p> <p>25 Q So in your opinion that you have advanced in this case,</p>
<p style="text-align: right;">Page 115</p> <p>1 Q Go ahead and answer it.</p> <p>2 A Well, there are limits to what students are taught,</p> <p>3 certainly.</p> <p>4 Q You know, in assessing what is good pedagogy, certainly</p> <p>5 there are things that guide that assessment, correct?</p> <p>6 A Typically, yes.</p> <p>7 Q So for instance, one would be that what is being taught</p> <p>8 is accurate?</p> <p>9 A Yes and no. If one were to talk about thesis and</p> <p>10 antithesis, black versus white, one might teach about</p> <p>11 something that one might classify as inaccurate.</p> <p>12 Q Give me an example?</p> <p>13 A If you were to make a statement about -- this is</p> <p>14 extremely elementary --</p> <p>15 Q Please, that's about my level.</p> <p>16 A -- you know, what two plus two is, you might also talk</p> <p>17 about what it is not.</p> <p>18 Q What would be inaccurate in that?</p> <p>19 A What would be inaccurate in that?</p> <p>20 Q Right. If you're telling them two plus two is four and</p> <p>21 two plus two is not five, where is the inaccuracy there?</p> <p>22 A The latter.</p> <p>23 Q But you're telling them it's not five, so you're</p> <p>24 teaching them accurately that two plus two is not five?</p> <p>25 A Yeah, that's what I'm saying, you might present the</p>	<p style="text-align: right;">Page 117</p> <p>1 you've made some assumptions, and for instance, one of</p> <p>2 the assumptions is that intelligent design is a</p> <p>3 scientific theory, is that correct?</p> <p>4 A Correct.</p> <p>5 Q If intelligent design was not in fact a scientific</p> <p>6 theory, just assume for the moment if intelligent design</p> <p>7 was not a valid scientific theory, then would your</p> <p>8 opinion be different?</p> <p>9 A So now you have to go all the way back to the beginning</p> <p>10 of the question.</p> <p>11 Q You've said that teaching this policy is good pedagogy,</p> <p>12 fair summary?</p> <p>13 A I don't know if I'd say teaching as much as this policy.</p> <p>14 I mean, this statement, this policy.</p> <p>15 Q So whether it's teaching or exposing students to the</p> <p>16 concept of intelligent design as an alternative</p> <p>17 scientific theory to evolution, you've made an</p> <p>18 assumption there that intelligent design is a scientific</p> <p>19 theory, correct?</p> <p>20 A Correct.</p> <p>21 But can we take a break? I'm sorry.</p> <p>22 Q Take a break as in?</p> <p>23 A Correct. Lunch did not agree with me.</p> <p>24 Q Okay, sure.</p> <p>25 A Thank you.</p>

30 (Pages 114 to 117)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 118</p> <p>1 (Short recess.)</p> <p>2 BY MR. WALCZAK:</p> <p>3 Q Let me try to recapture where we were.</p> <p>4 Your opinion is that the Dover policy, whether it</p> <p>5 teaches or introduces students to intelligent design and</p> <p>6 says that it is a scientific alternative to evolution is</p> <p>7 good pedagogy rests on the assumption that intelligent</p> <p>8 design is a scientific alternative, correct?</p> <p>9 A Are you asking me do I think intelligent design is</p> <p>10 science?</p> <p>11 Q I'm asking you is that an assumption that you have made,</p> <p>12 that intelligent design is a scientific theory?</p> <p>13 A I don't know if I'd say an assumption as much as it is</p> <p>14 looking at what others have presented who work in</p> <p>15 intelligent design, what they've presented about their</p> <p>16 work and so forth.</p> <p>17 Q Well, if intelligent design were not a scientific</p> <p>18 theory, then your conclusion that this policy is good</p> <p>19 pedagogy would be different, wouldn't it?</p> <p>20 MR. THOMPSON: Objection, calls for speculation,</p> <p>21 assuming facts not in evidence.</p> <p>22 BY MR. WALCZAK:</p> <p>23 Q Go ahead.</p> <p>24 A The policy is raising awareness amongst students that</p> <p>25 there are other alternatives.</p>	<p style="text-align: right;">Page 120</p> <p>1 Q So not everything that a teacher says in class during</p> <p>2 instructional period is teaching?</p> <p>3 A That's what we said earlier.</p> <p>4 Q But the example you gave about teaching an inaccuracy,</p> <p>5 you were not allowing students to come away from that</p> <p>6 believing that it was accurate, you were pointing out</p> <p>7 the inaccuracy, right? In the two plus two equals five</p> <p>8 model, you were saying you would teach two plus two</p> <p>9 equals four, two plus two does not equal five, so you're</p> <p>10 not teaching something that's inaccurate?</p> <p>11 A It's included as part of your teaching.</p> <p>12 Q Right. But the accuracy of the content is an element of</p> <p>13 good pedagogy?</p> <p>14 A It is an element.</p> <p>15 Q So if what you were teaching was inaccurate, that would</p> <p>16 not be good pedagogy?</p> <p>17 A Again, you could include it in your teaching, but if</p> <p>18 you're trying to at the end of the day have students</p> <p>19 walk away understanding that two plus two is five,</p> <p>20 obviously, that would be a problem.</p> <p>21 Q So it's got to be taught in a way that ultimately the</p> <p>22 student is told whether it's accurate or not accurate?</p> <p>23 A Clearly indicating or therabouts, yeah.</p> <p>24 Q Yes. So I mean, if what is being taught or introduced</p> <p>25 to students is misleading, that too would not be good</p>
<p style="text-align: right;">Page 119</p> <p>1 Q But it mentions only one. I mean, it doesn't mention</p> <p>2 Racism, does it?</p> <p>3 A Obviously not.</p> <p>4 Q Does it mention Lamarckism?</p> <p>5 A Clearly not.</p> <p>6 Q So what's the only alternative it mentions?</p> <p>7 A Well, it's in writing. Obviously, the only one they</p> <p>8 mention is intelligent design. But they can't possibly</p> <p>9 list all alternatives. It is an alternative.</p> <p>10 Q But for something to be good pedagogy, it's got to be</p> <p>11 accurate, correct? I mean, you don't want to teach</p> <p>12 something that's inaccurate?</p> <p>13 A As we said before, you might present something else.</p> <p>14 Q Right. But then you're going to say that this is</p> <p>15 inaccurate, right, so you're not teaching an inaccuracy?</p> <p>16 A That assumes that you are teaching it.</p> <p>17 Q Would you introduce to students the concept, for</p> <p>18 instance, that, you know, just the teacher would stand</p> <p>19 up at the front of the class and say, "Two plus two</p> <p>20 equals five. We're now going to resume our mathematics</p> <p>21 lesson"?</p> <p>22 A I -</p> <p>23 Q Is that teaching, would that be teaching?</p> <p>24 A I wouldn't -- going back to what we talked about</p> <p>25 earlier, I don't know that I would call that teaching.</p>	<p style="text-align: right;">Page 121</p> <p>1 pedagogy?</p> <p>2 A If what is being taught is represented as accurate, that</p> <p>3 would be a problem.</p> <p>4 Q If it was in fact inaccurate?</p> <p>5 A If it's inaccurate and being taught as accurate.</p> <p>6 Q And if what is being taught is misleading, is that good</p> <p>7 pedagogy?</p> <p>8 A I guess you'll have to -- what do you mean by</p> <p>9 misleading?</p> <p>10 Q Well, let's say you taught students that man once walked</p> <p>11 with dinosaurs. Would that be good pedagogy?</p> <p>12 A How is it being included?</p> <p>13 Q In a biology class if you said to students reviewing a</p> <p>14 chapter on dinosaurs, "Man once walked with dinosaurs"?</p> <p>15 A If you taught that as accurate or fact, is that what</p> <p>16 you're saying? That would be questionable.</p> <p>17 Q So would that be good or bad pedagogy to tell students</p> <p>18 that man walked with dinosaurs?</p> <p>19 A Again, if you're including it as a thesis/antithesis as</p> <p>20 one model or another model as representing something as</p> <p>21 fact, representing something as unquestioned, accurate,</p> <p>22 to use your word, that would be problematic.</p> <p>23 Q So if you taught in science class that some people</p> <p>24 believe that man walked on the earth with dinosaurs,</p> <p>25 that would be good pedagogy, that would be appropriate?</p>

31 (Pages 118 to 121)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 122</p> <p>1 A So much of this is contextual. That particular one is 2 very contextual.</p> <p>3 Q We're talking about science class, we're having a 4 discussion of dinosaurs, and there's -- they teach that 5 dinosaurs walked the earth millions of years before man 6 arrived. If you then also added to that "And some 7 people believe that dinosaurs walked on this earth with 8 man," would that be appropriate in a science class?</p> <p>9 A Again, it's contextual. I mean, one would have to ask 10 why are you including that, what's the objective, 11 et cetera, et cetera. That's what I mean by contextual.</p> <p>12 Q To promote -- encourage critical thinking.</p> <p>13 A Potentially.</p> <p>14 Q So that would be okay?</p> <p>15 A Potentially.</p> <p>16 Q And that wouldn't -- would that be -- would it be 17 misleading to introduce in a science class the notion 18 that man and dinosaurs walked on the earth at the same 19 time?</p> <p>20 A No, no, no, what you said was -- you've just presented 21 two different things.</p> <p>22 Q I know, I've changed it.</p> <p>23 MR. THOMPSON: Objection. You asked -- the 24 question the first time is if some people thought that, 25 and the next time you used, instead of "some people,"</p>	<p style="text-align: right;">Page 124</p> <p>1 A I guess we're going over the same ground.</p> <p>2 Q Right, let me give you some hypotheticals. Would that 3 be good pedagogy?</p> <p>4 A If you're teaching the earth is flat as an accurate 5 statement, as a fact, probably not.</p> <p>6 Q Probably not or definitely not?</p> <p>7 A Again, as you said it, "Boys and girls, the earth is 8 flat," one would say no.</p> <p>9 Q And that's because? Why would that not be appropriate?</p> <p>10 A There appears to be pretty wide consensus that that is 11 not an accurate or true representation of the world.</p> <p>12 Q How about if you -- the teacher taught that the universe 13 revolves around the earth, would that be good pedagogy?</p> <p>14 A Again, are they presenting this as fact or are they 15 saying this is what some people think or --</p> <p>16 Q No, as fact.</p> <p>17 A It certainly wouldn't be consistent with state 18 standards.</p> <p>19 Q How about if a science teacher presented the theory of 20 cold fusion and said there is this theory of cold 21 fusion?</p> <p>22 A Okay.</p> <p>23 Q Would that be good science pedagogy?</p> <p>24 A Well, I don't know that I could answer that.</p> <p>25 Q Why?</p>
<p style="text-align: right;">Page 123</p> <p>1 you used "notion." There's two totally different 2 hypothetical situations there.</p> <p>3 MR. WALCZAK: Right. I've changed it.</p> <p>4 BY MR. WALCZAK:</p> <p>5 Q So instead of saying some people believe, now you say 6 that there's another school of thought that dinosaurs 7 walked on the earth at the same time as people.</p> <p>8 A And your question would be?</p> <p>9 Q Is that appropriate, is that --</p> <p>10 A Potentially. Again, that's what I mean, it's 11 contextual.</p> <p>12 Q What does it depend on?</p> <p>13 A Well, I think it depends on what are your objectives, 14 what is your purpose for introducing that content, what 15 points are you trying to make, what is it you want 16 students to know, what pedagogy are you trying to use 17 here, things like that.</p> <p>18 Q I guess there must be some standards or judgments made 19 about whether it's appropriate to teach something? Are 20 there standards that exist to decide whether something 21 should be taught?</p> <p>22 A Yeah. Well, now all states teach to their own 23 standards.</p> <p>24 Q So would it be appropriate in a science class to teach 25 the earth is flat, would that be good pedagogy?</p>	<p style="text-align: right;">Page 125</p> <p>1 A Because I'm not a cold fusion -- that's not something I 2 know much about.</p> <p>3 Q There are scientists who believe in cold fusion.</p> <p>4 A Okay. Well, again, I couldn't --</p> <p>5 Q Would it be -- so would it be good pedagogy, for 6 instance, to say there are scientists who believe in 7 cold fusion who may --</p> <p>8 MR. THOMPSON: He's answered he doesn't know much 9 about it, so he couldn't answer the question, and you're 10 asking the same question over again.</p> <p>11 BY MR. WALCZAK:</p> <p>12 Q If you said -- I mean, assume the truth of what I'm 13 saying, that there are scientists out there who have 14 said cold fusion is a valid theory. If it was taught, 15 if a teacher said there are scientists out there who 16 believe in cold fusion, here's a book you can read to 17 learn more about it, would that be appropriate?</p> <p>18 A Well, you've got a couple different things working 19 there. You asked me before is it appropriate for 20 teachers to teach cold fusion or even to tell students 21 that some believe in cold fusion. That's one thing. If 22 I'm a practicing school principal, I may go back and 23 look at our state and district standards and ask is this 24 something that we have to teach or should teach 25 consistent with what the students need to know or be</p>

32 (Pages 122 to 125)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 126</p> <p>1 able to do.</p> <p>2 Q So one of the places you'd look would be the state</p> <p>3 standards?</p> <p>4 A Inevitably.</p> <p>5 Q What about if a teacher said homosexuality is a matter</p> <p>6 of genetics and not life-style, would that be</p> <p>7 appropriate for a teacher to say that in class?</p> <p>8 A Again, going back to what does the district and what</p> <p>9 does the state say students need to know and be able to</p> <p>10 do about this.</p> <p>11 Q Let's say that it's silent, let's say the standards are</p> <p>12 silent on homosexuality and a teacher decides that I'm</p> <p>13 going to tell the students that homosexuality is an</p> <p>14 issue of orientation, it's biological, not a life-style</p> <p>15 choice, is that appropriate for -- is that good pedagogy</p> <p>16 for teachers to say that?</p> <p>17 A I think good pedagogy is what do the students need to</p> <p>18 know and be able to do. The time span that students</p> <p>19 have in class and teachers have with students is</p> <p>20 remarkably limited given all the things that students</p> <p>21 have to know and be able to do and will be tested on, so</p> <p>22 very often I tell and used to tell teachers that they</p> <p>23 need to be parsimonious.</p> <p>24 Q Okay. But would it be good pedagogy for a teacher to</p> <p>25 teach that?</p>	<p style="text-align: right;">Page 128</p> <p>1 that you've told them is in the library.</p> <p>2 A As are many books.</p> <p>3 Q So how have you not introduced the concept?</p> <p>4 A You haven't defined it for them, they haven't -- you've</p> <p>5 not told them what it is, just that there is this term.</p> <p>6 Q So what's the purpose of doing that?</p> <p>7 A That students understand that there are other</p> <p>8 alternatives.</p> <p>9 Q So you're teaching -- you're telling students that there</p> <p>10 are alternatives to evolution and one of them is</p> <p>11 intelligent design, we're not going to tell you any</p> <p>12 more, you've got to go find out on your own, but you</p> <p>13 have introduced the concept that there is an alternative</p> <p>14 to evolution and it's called intelligent design?</p> <p>15 A You've --</p> <p>16 MR. THOMPSON: Objection. I think the confusion</p> <p>17 here is what do you mean by the term "concept." The</p> <p>18 concept can be defined in different ways. He's just</p> <p>19 saying it's the term, it's not the concept.</p> <p>20 BY MR. WALCZAK:</p> <p>21 Q Well, how would you define a concept?</p> <p>22 A To me, concept denotes more than simply the term. Some</p> <p>23 level of understanding about what it is.</p> <p>24 Q Behind the term is there a concept?</p> <p>25 A Yeah, behind all terms there are concepts.</p>
<p style="text-align: right;">Page 127</p> <p>1 A Again, if it's something the students need to know and</p> <p>2 be able to do and it's consistent with content standards</p> <p>3 and they're going to be tested on it, then that would be</p> <p>4 something that a teacher would need to do. But if it's</p> <p>5 not, then --</p> <p>6 Q But I'm saying if it's -- you know, intelligent design</p> <p>7 is not required to be -- is not tested.</p> <p>8 A Nor is it taught.</p> <p>9 Q But you're spending time, even if it's only a minute,</p> <p>10 they've made a decision to spend time in the classroom</p> <p>11 alerting students to intelligent design?</p> <p>12 A Alerting them to its existence, but certainly not its</p> <p>13 definition.</p> <p>14 Q But alerting them to the whole concept --</p> <p>15 A No. What do you mean by "whole concept"?</p> <p>16 Q Well, the concept of intelligent design. I mean, you</p> <p>17 have introduced the concept of intelligent design into</p> <p>18 students' lives there. They may pick it up somewhere</p> <p>19 else, but but for this policy, students would not be</p> <p>20 exposed to this in school?</p> <p>21 A I don't know that I'd agree with either one of those.</p> <p>22 Q Why?</p> <p>23 A Number one, you've introduced the term. That doesn't</p> <p>24 necessarily mean you've introduced the concept.</p> <p>25 Q You've introduced the term and you've introduced a book</p>	<p style="text-align: right;">Page 129</p> <p>1 Q Right. So by alerting -- I mean, how do you label any</p> <p>2 concept?</p> <p>3 A How do you label the concept?</p> <p>4 Q Yeah. How do you designate a concept, how do you refer</p> <p>5 to a concept? You use a term, right?</p> <p>6 A Obviously.</p> <p>7 Q Right.</p> <p>8 A But in introducing a term, that doesn't necessarily mean</p> <p>9 you've introduced the concept. They're not synonymous.</p> <p>10 One is a metaphorical symbol or representation of</p> <p>11 something else. Just because you know the words doesn't</p> <p>12 necessarily mean you know the referent.</p> <p>13 Q You've encouraged students to explore the concept?</p> <p>14 A Okay.</p> <p>15 Q Yes?</p> <p>16 A Okay.</p> <p>17 Q In the Dover policy, is that right?</p> <p>18 A That's pretty clear, they encouraged them to -- they</p> <p>19 tell them their alternatives and to keep an open mind</p> <p>20 and so on and so forth. If you want more understanding,</p> <p>21 you can find out at the library.</p> <p>22 Q Let me give you another hypothetical. Let's say we're</p> <p>23 in health class and what they teach is that abortions</p> <p>24 are medically safe, and if you need one but are afraid</p> <p>25 to tell your parents, you can probably still get one</p>

33 (Pages 126 to 129)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 130</p> <p>1 without telling your parents by going to a judge and 2 here's a telephone number for a legal aid lawyer who can 3 help you. 4 Is that pedagogically appropriate? 5 A I'm going to sound redundant, but if that's something 6 that students need to know and be able to do according 7 to district and state standards, then you decide from 8 there. 9 Q It's about sexual -- it's about reproductive health. 10 Say the standard says students should know about health 11 and they're teaching and it's sort of vague and 12 they're -- I mean, the standards are vague, right? 13 A The state standard -- well, it depends. Some state 14 standards are far more detailed. But what you typically 15 find is state standards can be general, district-adopted 16 standards are far more specific. 17 Q Students should be familiar with reproductive health. 18 Is it appropriate to teach what I just read? 19 A Again, what is the School Board adopted, what is the 20 approved curriculum? 21 Q So there's no pedagogical standards outside what the 22 school decides? 23 A That may be true. There are other schools, other 24 districts, other states, other associations -- 25 Q Does every school district necessarily teach well?</p>	<p style="text-align: right;">Page 132</p> <p>1 standards, their curricula and so forth. 2 (Exhibit Number 3 was marked for identification.) 3 BY MR. WALCZAK: 4 Q I've shown you what's been marked as Exhibit 3. 5 Do you recognize this? 6 A Yes. 7 Q What is it? 8 A It appears to be the Pennsylvania state standards. 9 Q And in fact, you opined that the Dover policy is good 10 pedagogy because it's consistent with the Pennsylvania 11 state standards? 12 A Correct. 13 Q Please show me in here where it mentions intelligent 14 design? 15 A It does not. 16 Q It doesn't? 17 A Correct. 18 Q Oh. So if it's not in the standards, how is it good 19 pedagogy for the school to teach it? 20 A It's not teaching it, it's teaching evolution. 21 Q How is it good pedagogy to spend a minute of time in the 22 classroom introducing students to the concept? 23 A It's consistent with the standard that I referenced in 24 my report. 25 Q Is that on page 10?</p>
<p style="text-align: right;">Page 131</p> <p>1 A If only it were so. 2 Q Right. And how do you decide whether -- I mean, because 3 a school district decides to teach something in a 4 certain way doesn't make it right, is that correct? 5 A Well, again, teachers are employees of the school 6 district. They teach what they are told to teach. 7 Q But is there some independent standards about whether a 8 school district's pedagogy or curriculum is good, or is 9 it just up to every school district to decide for 10 themselves? 11 A Every school district is bound, at a minimum, to state 12 standards. 13 Q But are there standards in the field of education as to 14 what is the right way and the wrong way or a good way or 15 a bad way to teach? 16 A There are opinions, yes. 17 Q But there's no hard and fast rules? 18 A Well, somebody might call their opinion a rule. 19 Q How do you decide what gets taught in science class? 20 A How does one decide how it gets taught in science class? 21 Q Yeah. Is there a right way and a wrong way? What's the 22 process by which a school should decide what gets taught 23 in science class? 24 A Again, schools are bound to state standards. That's 25 what they have to include in their -- their district</p>	<p style="text-align: right;">Page 133</p> <p>1 A It's on page 10 of the standards? 2 Q Yeah. 3 A Thank you. To critically evaluate the status of 4 existing theories. It includes several in that list. 5 Q Do you know if the Dover School District reads a 6 statement similar to the one on evolution when it 7 teaches germ theory? 8 A I do not know. 9 Q Do you know if they read it when they teach wave theory? 10 A I do not know. 11 Q Epidemiology? 12 A I don't know. 13 Q I hate that word. But nowhere in these standards does 14 it mention intelligent design? 15 A Correct. 16 Q And so really, there's no reason to teach students 17 intelligent design? 18 A And the students are -- and the school is not. 19 Q Why is the school not teaching intelligent design? 20 A Well, I think it kind of harkens back to what I was 21 talking about earlier, time is limited and students are 22 tested on certain things, and the school needs to spend 23 its time on things that students will be tested on 24 according to state standards. 25 Q But intelligent design is not one of those?</p>

34 (Pages 130 to 133)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 134</p> <p>1 A One of those being taught?</p> <p>2 Q One of those being tested?</p> <p>3 A Correct.</p> <p>4 Q So this is not a justification for teaching intelligent design, "this" being the Pennsylvania state standards?</p> <p>5 A No, it's a justification for critically evaluating the existence of certain theories.</p> <p>6 Q So the state standards may support telling students about the need to think critically, but the standards do not support that part of the statement that introduces students to intelligent design?</p> <p>7 A The standards are supporting the idea of telling students the present status of a theory, in this case, evolution.</p> <p>8 Q But it doesn't suggest telling students about intelligent --</p> <p>9 A It doesn't name intelligent design.</p> <p>10 Q So the part of the statement that -- the third paragraph which talks about intelligent design is not supported by the Pennsylvania state standards?</p> <p>11 A It's supported in the sense that they're alerting students to the fact that there are alternatives.</p> <p>12 Q Where does it say alternatives -- to teach students about alternatives to evolution?</p> <p>13 A It's implicit in the idea of the status of an existing</p>	<p style="text-align: right;">Page 136</p> <p>1 Q Are you aware whether the achievement test in biology questions students about intelligent design?</p> <p>2 A You mean the state assessment, is that what you're talking about?</p> <p>3 Q Are there state and national tests?</p> <p>4 A Well, that depends. There is absolutely a state test.</p> <p>5 Q For like when you get advanced placement, correct?</p> <p>6 A The AP is the national, and then a school may participate in the NAEP, so that's a national.</p> <p>7 Q What's NAEP?</p> <p>8 A National Assessment of Educational Progress. So they may participate in that. Depending on -- and I don't know if Dover has different programs, but there are other programs that have state tests -- or national tests, as well, but for sure they will do state tests.</p> <p>9 Q Are you aware of any national or state tests that test students on intelligent design?</p> <p>10 A Not that I know of.</p> <p>11 Q So I want to come back and make sure I understand -- I'm coming back to the question of who and how do you decide what is appropriate to teach in science class. So you've mentioned the standards, state standards, and we've just established that Pennsylvania does not introduce the concept of intelligent design.</p> <p>12 MR. THOMPSON: Explicitly.</p>
<p style="text-align: right;">Page 135</p> <p>1 theory.</p> <p>2 Q It says "critically evaluate."</p> <p>3 A Um-hmm.</p> <p>4 Q It doesn't say anything in here -- does it say anything anywhere in the standards about introducing alternatives to evolution?</p> <p>5 MR. THOMPSON: Objection, asked and answered.</p> <p>6 BY MR. WALCZAK:</p> <p>7 Q Just humor me one more time.</p> <p>8 There's nothing in here about introducing students to, quote, all alternatives to evolution?</p> <p>9 A There is not specific language.</p> <p>10 Q Are you aware of any state standards that require students to learn about intelligent design?</p> <p>11 A None that I know of.</p> <p>12 Q Have you reviewed any?</p> <p>13 A Have I reviewed any what?</p> <p>14 Q Any state standards besides Pennsylvania's?</p> <p>15 A Certainly.</p> <p>16 Q Which ones?</p> <p>17 A Ohio, Colorado, Michigan, California, Texas, Florida, Arizona.</p> <p>18 Q In any of the ones that you've reviewed, none of them require that students learn about intelligent design?</p> <p>19 A That I read, correct.</p>	<p style="text-align: right;">Page 137</p> <p>1 MR. WALCZAK: Explicitly.</p> <p>2 MR. THOMPSON: But implicitly, he said it does.</p> <p>3 BY MR. WALCZAK:</p> <p>4 Q So are you saying that these standards support the reference to intelligent design?</p> <p>5 A Through the idea of critically evaluating theories, it supports the idea of -- in evaluating the theory talking about where the theory stands, alternatives, et cetera, et cetera.</p> <p>6 Q Now, is it good pedagogy to throw out an idea and then not discuss it?</p> <p>7 A I think we talked about this earlier, as well. There will be times that you will introduce a topic that you may not discuss or discuss at length.</p> <p>8 Q Or discuss at all?</p> <p>9 A Potentially.</p> <p>10 Q So give me an example?</p> <p>11 A So when I'm teaching statistics and I talk about analysis of variants and I teach that at length, I also tell students about other related procedures like MANOVA, MANCOVA, ANCOVA, and in the process, I introduce them to the fact that there are these things, but I don't necessarily teach them.</p> <p>12 Q And what grades do you teach?</p> <p>13 A Graduate students.</p>

35 (Pages 134 to 137)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 138</p> <p>1 Q You teach at the university level?</p> <p>2 A Correct.</p> <p>3 Q You said you hadn't read Of Pandas and People?</p> <p>4 A Correct.</p> <p>5 Q Do you know whether it is an accurate depiction of</p> <p>6 intelligent design?</p> <p>7 MR. THOMPSON: Objection. He just said he didn't</p> <p>8 read it, so how would he be able to answer that</p> <p>9 question?</p> <p>10 MR. WALCZAK: Well, he can answer that he doesn't</p> <p>11 know.</p> <p>12 A I don't know.</p> <p>13 BY MR. WALCZAK:</p> <p>14 Q So if Of Pandas and People were an inaccurate or a</p> <p>15 misleading explanation of intelligent design, would that</p> <p>16 change your opinion?</p> <p>17 MR. THOMPSON: Objection, speculation, assuming</p> <p>18 facts not in evidence.</p> <p>19 BY MR. WALCZAK:</p> <p>20 Q Go ahead and answer.</p> <p>21 A I would hesitate to answer because I don't know.</p> <p>22 Q Well, I mean, the policy says the reference book Of</p> <p>23 Pandas and People is available for any student to see</p> <p>24 if you would like to explore this view in an effort to</p> <p>25 gain an understanding of what intelligent design</p>	<p style="text-align: right;">Page 140</p> <p>1 said that?</p> <p>2 A In the classic definition that we talked about earlier,</p> <p>3 it's not teaching.</p> <p>4 Q Should a teacher do that, make those two statements?</p> <p>5 Would you object if you learned that a teacher made</p> <p>6 those statements?</p> <p>7 MR. THOMPSON: Objection. Again, it's vague,</p> <p>8 speculative, ambiguous, irrelevant to the issues at</p> <p>9 hand.</p> <p>10 BY MR. WALCZAK:</p> <p>11 Q Would you be upset if you knew that a teacher said those</p> <p>12 things in class?</p> <p>13 A Again, I go back to what I talked about earlier, is this</p> <p>14 part of our district-approved curriculum, are these</p> <p>15 according to standards, et cetera, et cetera.</p> <p>16 Q The curriculum says to teach about reproductive health</p> <p>17 and to teach about people in our society, it doesn't say</p> <p>18 anything specifically, but the teacher is not really</p> <p>19 teaching this, she's just saying these things at the</p> <p>20 start of class. Is that objectionable?</p> <p>21 MR. THOMPSON: Again --</p> <p>22 MR. WALCZAK: I'm giving him a hypothetical. I</p> <p>23 understand, but I'm giving him --</p> <p>24 MR. THOMPSON: But it's not -- it's irrelevant to</p> <p>25 anything we're talking about.</p>
<p style="text-align: right;">Page 139</p> <p>1 actually involves.</p> <p>2 Let's say that Of Pandas and People was, for</p> <p>3 instance, outdated and had errors in it. Would sending</p> <p>4 students to that book be good pedagogy?</p> <p>5 MR. THOMPSON: Objection, again, assuming facts not</p> <p>6 in evidence, speculation.</p> <p>7 MR. WALCZAK: You can have a standing objection.</p> <p>8 A Pedagogy connotes teaching, deliberate instruction.</p> <p>9 That isn't going on here.</p> <p>10 BY MR. WALCZAK:</p> <p>11 Q So why are you telling -- okay.</p> <p>12 So there's no problem telling students that</p> <p>13 homosexuality has a biological basis?</p> <p>14 MR. THOMPSON: Objection. It's irrelevant to the</p> <p>15 issues at hand.</p> <p>16 BY MR. WALCZAK:</p> <p>17 Q I mean, just getting up at the beginning of health class</p> <p>18 and saying homosexuality has a biological basis and</p> <p>19 abortions can be performed safely in medically safe</p> <p>20 procedures and you can get them even when you're 14 and</p> <p>21 15 years old by going to a judge --</p> <p>22 MR. THOMPSON: Objection, irrelevant, ambiguous</p> <p>23 questions, vague.</p> <p>24 BY MR. WALCZAK:</p> <p>25 Q So would that be teaching if a teacher just stood up and</p>	<p style="text-align: right;">Page 141</p> <p>1 MR. WALCZAK: Okay, fine.</p> <p>2 BY MR. WALCZAK:</p> <p>3 Q Answer the question.</p> <p>4 A Again, is it relevant to district standards, state --</p> <p>5 Q Yes.</p> <p>6 A -- standards and the approved curriculum?</p> <p>7 Q Yes, it's relevant, but it's not expressly required.</p> <p>8 A If it's not required and it's not part of the approved</p> <p>9 curriculum, then it's not something that teachers ought</p> <p>10 to spend time on. They have limited time.</p> <p>11 Q But you're applying a different standard now for</p> <p>12 intelligent design because it's not mentioned in these</p> <p>13 standards.</p> <p>14 A And they don't teach it in class.</p> <p>15 Q But my teacher is not teaching it either, she's simply</p> <p>16 making the statement that homosexuality has biological</p> <p>17 origins, that's it. She's not teaching -- maybe she'll</p> <p>18 say there's a book in the library that you might want to</p> <p>19 check out that will explain all that, but we're not</p> <p>20 going to discuss that anymore here.</p> <p>21 Is that objectionable?</p> <p>22 A It may be to some, but to others it will not be.</p> <p>23 Q Is that good pedagogy?</p> <p>24 A That is a matter of a district's and a school's opinion</p> <p>25 and practice. Some districts would clearly subscribe to</p>

36 (Pages 138 to 141)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 142</p> <p>1 it, while others would not.</p> <p>2 Q Can you tell me how Darwinian evolution is different</p> <p>3 from evolution?</p> <p>4 A Darwinian evolution as opposed to all evolution or what</p> <p>5 evolution?</p> <p>6 Q I mean, I use the term "evolution," but I repeatedly see</p> <p>7 in writings by the experts that you've cited who have</p> <p>8 done reports in this case and they talk about Darwinian</p> <p>9 evolution.</p> <p>10 How is Darwinian evolution different from</p> <p>11 evolution, do you know?</p> <p>12 A Well, from the general understanding of evolution being</p> <p>13 change over time, is that what you mean?</p> <p>14 Q I don't know, I'm asking you, I'm looking for help.</p> <p>15 A I bet you are. It fits within kind of this umbrella of</p> <p>16 change over time.</p> <p>17 Q Darwinian evolution?</p> <p>18 A Yes.</p> <p>19 Q But how is it different, what -- I mean, if it fits</p> <p>20 within, then it's smaller than.</p> <p>21 What distinguishes Darwinian evolution from</p> <p>22 evolution?</p> <p>23 A My understanding is that Darwinian evolution is more</p> <p>24 specific or is specific to issues around natural</p> <p>25 selection, for example, which the greater umbrella term</p>	<p style="text-align: right;">Page 144</p> <p>1 cause explanation of how the various forms of life</p> <p>2 started in the first place."</p> <p>3 Is that your understanding of intelligent design?</p> <p>4 A What I gave you is my understanding of intelligent</p> <p>5 design. I couldn't speak at great length about all of</p> <p>6 the intricacies about what Evolutionists believe about</p> <p>7 intelligent design, for example.</p> <p>8 Q Well, let's look at that next sentence. "Intelligent</p> <p>9 design means that various forms of life began abruptly</p> <p>10 through an intelligent agency, with their distinctive</p> <p>11 features all ready intact, fish with fins and scales,</p> <p>12 birds with feathers, beaks and wings, et cetera."</p> <p>13 Is that your understanding of intelligent design?</p> <p>14 A I will take the book at face value that that's how it's</p> <p>15 being defined by those in the field.</p> <p>16 Q So you don't independently know whether that's right or</p> <p>17 wrong?</p> <p>18 A Correct.</p> <p>19 Q Is that consistent with your understanding of</p> <p>20 intelligent design?</p> <p>21 A Again, I'll have to take that at face value that that's</p> <p>22 how they define it.</p> <p>23 Q Are there better descriptions of intelligent design than</p> <p>24 what is presented in Pandas?</p> <p>25 A I don't know.</p>
<p style="text-align: right;">Page 143</p> <p>1 of "evolution" doesn't necessarily or specifically</p> <p>2 connote.</p> <p>3 Q And what is Darwinism, how does that differ?</p> <p>4 A I think that would be the same.</p> <p>5 Q So Darwinism and Darwinian evolution are the same?</p> <p>6 A That's my guess. I don't know for a fact.</p> <p>7 Q And explain for me what is intelligent design?</p> <p>8 MR. THOMPSON: Objection. I think you asked that</p> <p>9 question early on.</p> <p>10 MR. WALCZAK: I don't think I did, actually.</p> <p>11 A Intelligent design proposes that certain aspects of</p> <p>12 living things indicate or were as a result of</p> <p>13 intelligent design or design principles rather than</p> <p>14 self-organization.</p> <p>15 BY MR. WALCZAK:</p> <p>16 Q In the book Pandas, it says -- I'll show it to you so</p> <p>17 you don't have to believe me.</p> <p>18 (Exhibit Number 4 was marked for identification.)</p> <p>19 BY MR. WALCZAK:</p> <p>20 Q This is from Of Pandas and People. On the bottom of the</p> <p>21 first page, the last paragraph there.</p> <p>22 A Are you asking me to read it?</p> <p>23 Q Let me read that first sentence and I'll ask you if I</p> <p>24 read it correctly. "Evolutionists object to the view of</p> <p>25 intelligent design because it does not give a natural</p>	<p style="text-align: right;">Page 145</p> <p>1 Q You don't know?</p> <p>2 A No.</p> <p>3 Q So you haven't read any other books about intelligent</p> <p>4 design, in fact, you --</p> <p>5 MR. THOMPSON: He hasn't read Of Pandas and People,</p> <p>6 as well.</p> <p>7 MR. WALCZAK: Right.</p> <p>8 A Correct, I did not read that.</p> <p>9 BY MR. WALCZAK:</p> <p>10 Q So you haven't read any books about intelligent design?</p> <p>11 A Only what we talked about earlier.</p> <p>12 Q Which was Behe's report, I believe?</p> <p>13 A Behe's report and --</p> <p>14 Q And some news articles?</p> <p>15 A Right, and other sources.</p> <p>16 Q Do you know what version of the book the Dover School</p> <p>17 Board is using?</p> <p>18 A No idea.</p> <p>19 Q Do you know if there are newer versions of the book?</p> <p>20 A I don't know.</p> <p>21 Q Do you know if there have been changes in ID theory</p> <p>22 since the Pandas book was written?</p> <p>23 A I suspect so, but I don't know that for a fact.</p> <p>24 Q Who or what is the intelligent agent in intelligent</p> <p>25 design?</p>

37 (Pages 142 to 145)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 146</p> <p>1 A I have no idea.</p> <p>2 Q You don't know?</p> <p>3 A No.</p> <p>4 Q Is it God?</p> <p>5 MR. THOMPSON: He just said he didn't know. Asked</p> <p>6 and answered.</p> <p>7 A I don't know.</p> <p>8 BY MR. WALCZAK:</p> <p>9 Q I think you mentioned there was research going on into</p> <p>10 intelligent design.</p> <p>11 Are you aware of any research being done to test</p> <p>12 who the -- who or what the designer is?</p> <p>13 A I don't know that.</p> <p>14 Q Can you think of a way to test that?</p> <p>15 A To test the existence of the source of intelligent</p> <p>16 design?</p> <p>17 Q To test the identity of the designer?</p> <p>18 A Are you asking me are they doing that or are you asking</p> <p>19 me --</p> <p>20 Q Do you know if they're trying to --</p> <p>21 A Oh, I don't know that.</p> <p>22 Q And you wouldn't know how to construct a test for the</p> <p>23 identity of the designer?</p> <p>24 A Given that it's not my field.</p> <p>25 Q Do you know how old the earth is under intelligent</p>	<p style="text-align: right;">Page 148</p> <p>1 Q Do you know if he's involved in research on it?</p> <p>2 A I don't know that.</p> <p>3 Q Do you know if he was involved in the formulation of the</p> <p>4 theory?</p> <p>5 A I don't know that.</p> <p>6 (Exhibit Number 5 was marked for identification.)</p> <p>7 BY MR. WALCZAK:</p> <p>8 Q I show you what's been marked as Exhibit 5. This is</p> <p>9 actually an article out of Touchstone Magazine in 1999</p> <p>10 entitled The Wedge by Phillip Johnson.</p> <p>11 MR. THOMPSON: Is there a question to that?</p> <p>12 MR. WALCZAK: Yeah. The question I had asked is</p> <p>13 are you familiar with The Wedge, and Dr. Carpenter asked</p> <p>14 if I could give him --</p> <p>15 A More specifics.</p> <p>16 BY MR. WALCZAK:</p> <p>17 Q Right.</p> <p>18 A Correct. I'm familiar with it in the sense that I think</p> <p>19 one of the experts talked about it in this -- in</p> <p>20 relation to this.</p> <p>21 Q And do you know what it is?</p> <p>22 A From what the expert said, as she defined it, it was a</p> <p>23 way to introduce the topic of intelligent design, I</p> <p>24 think is what she said. If I'm misrepresenting her, I</p> <p>25 apologize.</p>
<p style="text-align: right;">Page 147</p> <p>1 design theory?</p> <p>2 A No.</p> <p>3 THE WITNESS: Do we need to take a break?</p> <p>4 MR. THOMPSON: We should probably.</p> <p>5 (Short recess.)</p> <p>6 BY MR. WALCZAK:</p> <p>7 Q Does intelligent design promote a supernatural cause</p> <p>8 agent or a natural cause agent?</p> <p>9 A I don't know.</p> <p>10 Q You don't know?</p> <p>11 A Correct.</p> <p>12 Q Is intelligent design religious?</p> <p>13 A I don't think so.</p> <p>14 Q But do you know?</p> <p>15 A I mean, I've not read anything that would indicate it</p> <p>16 is.</p> <p>17 Q Are you familiar with something called The Wedge?</p> <p>18 A Can you be more specific?</p> <p>19 Q Are you familiar with the name Phillip Johnson?</p> <p>20 A Um-hmm. I'm sorry, yes.</p> <p>21 Q What do you know about Phillip Johnson?</p> <p>22 A I think he's a professor emeritus at -- I think he's in</p> <p>23 the UC system. He's an attorney.</p> <p>24 Q Does he have something to do with intelligent design?</p> <p>25 A My understanding is he speaks about it.</p>	<p style="text-align: right;">Page 149</p> <p>1 Q So you don't have any independent knowledge other than</p> <p>2 what you read in one or more of the expert reports?</p> <p>3 A Correct.</p> <p>4 Q Do you know what is irreducible complexity?</p> <p>5 A My understanding is that it's the idea that an organism</p> <p>6 has to have a certain collection, configuration, group</p> <p>7 of component parts, and without those component parts,</p> <p>8 it doesn't operate or function.</p> <p>9 Q And is that an element of intelligent design?</p> <p>10 A That's my understanding from reading the reports.</p> <p>11 Q Do you know how you get from irreducible complexity to</p> <p>12 intelligent design?</p> <p>13 A Not in detail, no.</p> <p>14 Q What do you know?</p> <p>15 A There's a discussion about probabilities around</p> <p>16 self-organization creating those component parts as you</p> <p>17 see them as opposed to the likelihood of intelligent</p> <p>18 design.</p> <p>19 Q Now, if, for instance, there was an example used for</p> <p>20 intelligent design that said here's an irreducibly</p> <p>21 complex object, and then science as they keep learning</p> <p>22 new things found in fact that this was not an</p> <p>23 irreducibly complex thing, would that refute intelligent</p> <p>24 design?</p> <p>25 A Well, it's a refutation of some part of intelligent</p>

38 (Pages 146 to 149)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 150</p> <p>1 design.</p> <p>2 Q Do you know anything about bacterial flagellum?</p> <p>3 A Only that there is such a thing.</p> <p>4 Q So are you familiar with Professor Behe's explanation of</p> <p>5 intelligent design using bacterial flagellum?</p> <p>6 A Familiar?</p> <p>7 Q Have you learned it? Has he taught it to you?</p> <p>8 A He certainly didn't teach it to me personally.</p> <p>9 Q Do you understand it?</p> <p>10 A Inasmuch as what I read in his report. And others, I</p> <p>11 think others referenced it, as well.</p> <p>12 Q But you don't have any kind of background of cell</p> <p>13 biology?</p> <p>14 A No.</p> <p>15 Q In your report you talk about different ways of knowing,</p> <p>16 right?</p> <p>17 A Correct.</p> <p>18 Q You also said that you don't know whether intelligent</p> <p>19 design has a natural or a supernatural causation model?</p> <p>20 A I don't know that for a fact. I assume it was natural,</p> <p>21 but I don't --</p> <p>22 Q You assume that it's natural?</p> <p>23 A From what I've read, that's my understanding.</p> <p>24 Q Assume for a moment that intelligent design is</p> <p>25 supernatural causation. Is it appropriate to teach in</p>	<p style="text-align: right;">Page 152</p> <p>1 prison.</p> <p>2 Are there any standards to judge whether a science</p> <p>3 curriculum is good or bad?</p> <p>4 A Yes, there are multiple standards. The districts have</p> <p>5 theirs, the state has theirs, each state has theirs, and</p> <p>6 then associations have theirs, one of them being the</p> <p>7 National Science Education Standards, and there may be</p> <p>8 others that I'm unaware of.</p> <p>9 Q And do you know whether any of the national</p> <p>10 associations, societies, academies' standards talk about</p> <p>11 supernatural causation?</p> <p>12 A I don't know that.</p> <p>13 Q So you don't know whether they talk about them or you</p> <p>14 don't know what they say?</p> <p>15 A I don't know whether they talk about them.</p> <p>16 Q So you haven't consulted those?</p> <p>17 A I consulted the ones that I listed or referenced.</p> <p>18 Q Would you consider those national associations</p> <p>19 societies, academics, would you consider any standards</p> <p>20 they put out to be authoritative?</p> <p>21 A Authoritative in what sense?</p> <p>22 Q Would you consider them to be a good guide as to whether</p> <p>23 or not a particular curriculum is good pedagogically?</p> <p>24 A They are a guide and probably a respected guide, but</p> <p>25 schools are bound only to their specific states and</p>
<p style="text-align: right;">Page 151</p> <p>1 science class?</p> <p>2 MR. THOMPSON: I'll object as vague. When you say</p> <p>3 "appropriate," under what -- you know, what standard,</p> <p>4 appropriate constitutionally, appropriate pedagogically?</p> <p>5 MR. WALCZAK: Pedagogically.</p> <p>6 MR. THOMPSON: Okay.</p> <p>7 A I think we're back to where we were before in the sense</p> <p>8 that what is the District's curriculum, what are their</p> <p>9 standards, what is the approved curriculum.</p> <p>10 BY MR. WALCZAK:</p> <p>11 Q So you're -- and I'm sorry because maybe I'm just</p> <p>12 hearing what I want to hear or I'm not understanding</p> <p>13 what I'm hearing.</p> <p>14 So there are no standards outside of a school</p> <p>15 district's as to what is good or bad pedagogy for a</p> <p>16 science curriculum?</p> <p>17 A If we define standards as a list of what students should</p> <p>18 know and be able to do, is that how we're defining</p> <p>19 standards?</p> <p>20 Q How do you want to define standards? How are standards</p> <p>21 defined? I mean, I know there's the state standards.</p> <p>22 Is there -- I mean, I'm looking for a normative</p> <p>23 benchmark against which to judge something in the</p> <p>24 science curriculum. In prison litigation, the American</p> <p>25 Correctional Association has standards for a well-run</p>	<p style="text-align: right;">Page 153</p> <p>1 districts.</p> <p>2 Q Now, are we distinguishing -- are you making a</p> <p>3 distinction between legal standards and pedagogical</p> <p>4 standards here? Clearly, a school is bound</p> <p>5 by -- legally bound by the standards that are passed by</p> <p>6 the district or are passed by the state. I'm talking</p> <p>7 about pedagogical, not legal standards here.</p> <p>8 A I do understand what you mean. I was speaking</p> <p>9 specifically for sure of the legal, in print, published</p> <p>10 standards. But many districts -- not so much states,</p> <p>11 but many districts, maybe even most districts, will also</p> <p>12 have standards around pedagogy, as well.</p> <p>13 Q And who is in a better position to decide standards on</p> <p>14 particular topics, is it each individual school district</p> <p>15 or might it be the national societies, academics,</p> <p>16 organizations?</p> <p>17 A That's a value judgment you're asking me to make.</p> <p>18 Q I am.</p> <p>19 A In some ways, it's -- I think it's the locality informs</p> <p>20 us some way by the larger discussion.</p> <p>21 Q What larger discussion?</p> <p>22 A The larger community, if you will.</p> <p>23 Q You mean the community where the schools are located?</p> <p>24 A Well, most certainly that, but I was thinking beyond</p> <p>25 that, as well, that school districts take into account a</p>

39 (Pages 150 to 153)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 154</p> <p>1 discussion greater than just what's going on in their</p> <p>2 district. So within their community, within their</p> <p>3 state, et cetera.</p> <p>4 Q Are you aware of national standards in other subject</p> <p>5 areas besides the sciences?</p> <p>6 A Am I aware of them?</p> <p>7 Q Yeah.</p> <p>8 A Um-hmm. I'm sorry, yes.</p> <p>9 Q What other topic areas have national standards?</p> <p>10 A Practically every one of them. English, math, social</p> <p>11 studies, dance. I mean --</p> <p>12 Q And I'm trying to educate myself.</p> <p>13 A Sure.</p> <p>14 Q Let's take social studies, who puts out the standards on</p> <p>15 social studies?</p> <p>16 A The process looks very similar across disciplines in</p> <p>17 that there will be various national organizations that</p> <p>18 are dedicated to that discipline who either will work by</p> <p>19 themselves or in concert with other like organizations</p> <p>20 to produce standards, and then there are the states that</p> <p>21 produce their standards and the districts that produce</p> <p>22 their standards. I mean, the process is very similar</p> <p>23 across these disciplines.</p> <p>24 Q And is the expertise relied on at each level the same?</p> <p>25 A Do you mean --</p>	<p style="text-align: right;">Page 156</p> <p>1 A Absolutely.</p> <p>2 Q So you look at them from whether the curriculum is legal</p> <p>3 more so than whether it's pedagogically good?</p> <p>4 A Boy, there's a lot in that. Certainly the short answer</p> <p>5 would be yes, we look at them from the legal perspective</p> <p>6 because that's what students have to know and that's</p> <p>7 what they want to know. They're not big on theory. But</p> <p>8 we also talk beyond legal, as well. I wouldn't want to</p> <p>9 leave the impression that it's just a legalistic view of</p> <p>10 program evaluation, it's not that.</p> <p>11 Q And do the national standards inform what is a good</p> <p>12 programmatic model?</p> <p>13 A In our discussion? Again, not as often. I would be</p> <p>14 surprised if you would find that -- in the type of class</p> <p>15 I teach, I would be surprised if you'd find that.</p> <p>16 (Exhibit Number 6 was marked for identification.)</p> <p>17 BY MR. WALCZAK:</p> <p>18 Q I'll show you what's been marked as Exhibit 6.</p> <p>19 Have you seen this document before?</p> <p>20 A No.</p> <p>21 Q It's a newspaper article from The Seattle Times from</p> <p>22 March 31st.</p> <p>23 Do you know who Stephen Meyer is?</p> <p>24 MR. WALCZAK: Is it Meyer, Mayor (ph), Dick?</p> <p>25 MR. THOMPSON: I say Meyer, but I'm not -- I've</p>
<p style="text-align: right;">Page 155</p> <p>1 Q Well, is there a qualitative difference in kind of the</p> <p>2 standards and the process that goes into developing the</p> <p>3 standards, is there a state, national, local?</p> <p>4 A Perhaps in some disciplines there might be some notable</p> <p>5 differences.</p> <p>6 Q And so the differences would be what? I mean, the</p> <p>7 standards would be more sophisticated, more informed at</p> <p>8 the national level than the state level?</p> <p>9 A Often it's a matter of who, who is involved or what type</p> <p>10 of person is involved at what level. Some states will</p> <p>11 align closely with professional organizations, others</p> <p>12 won't.</p> <p>13 Q And do you look to national standards in other</p> <p>14 disciplines outside the natural sciences as a benchmark</p> <p>15 for good or bad pedagogy?</p> <p>16 A Not necessarily. I mean, when I teach a class, I teach</p> <p>17 a class on program evaluation, and in the class I</p> <p>18 often -- not often, I do talk to students and we discuss</p> <p>19 aligning curricular activities with standards and how</p> <p>20 does one measure effectiveness and so on and so forth,</p> <p>21 and in that class we spend most of our time looking at</p> <p>22 alignment between curricular issues, lessons and so</p> <p>23 forth, with district standards and then with state</p> <p>24 standards.</p> <p>25 Q So the ones that are legally binding?</p>	<p style="text-align: right;">Page 157</p> <p>1 never talked to him, so I don't know.</p> <p>2 A It says here that he's the Director of the Center for</p> <p>3 Science and Culture.</p> <p>4 BY MR. WALCZAK:</p> <p>5 Q Had you ever heard his name before?</p> <p>6 A I have heard of his name, yes.</p> <p>7 Q Have you ever met him?</p> <p>8 A Never.</p> <p>9 Q You never talked to him?</p> <p>10 A No.</p> <p>11 Q Do you know anything about the Discovery Institute?</p> <p>12 A Only just very briefly.</p> <p>13 Q I want you to look on page 3 of 4. I want you to go to</p> <p>14 the ninth paragraph, full paragraph, it starts "Meyer,</p> <p>15 however."</p> <p>16 A Okay.</p> <p>17 Q The second sentence. "His goal, a big one, is to change</p> <p>18 the very definition of science so that it doesn't rule</p> <p>19 out the possibility that an intelligent designer is</p> <p>20 actively at work." And "Science should be open to</p> <p>21 whatever cause ... can best explain the data."</p> <p>22 Does that accord with your understanding of</p> <p>23 intelligent design, that you really need to change the</p> <p>24 definition of science to be able to teach intelligent</p> <p>25 design?</p>

40 (Pages 154 to 157)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 158</p> <p>1 A Again, I don't know that firsthand.</p> <p>2 Q You don't know?</p> <p>3 A Correct. Because I don't know -- I --</p> <p>4 Q If in fact intelligent design is predicated on</p> <p>5 supernatural causation, is it appropriate to teach or to</p> <p>6 even introduce the subject in a biology class?</p> <p>7 MR. THOMPSON: Objection. That calls for a legal</p> <p>8 conclusion. In what context?</p> <p>9 BY MR. WALCZAK:</p> <p>10 Q Go ahead and answer.</p> <p>11 A Why don't you repeat it for me.</p> <p>12 Q Assuming here, as it seems Mr. Meyer is, that</p> <p>13 intelligent design is predicated on supernatural</p> <p>14 causation, would it be pedagogically appropriate, not</p> <p>15 legally, but pedagogically appropriate to introduce</p> <p>16 intelligent design into a biology course?</p> <p>17 A It could be, yes.</p> <p>18 Q And explain that?</p> <p>19 A Well, it's -- if you're -- if you tell students that</p> <p>20 there are alternatives, intelligent design is one of</p> <p>21 those, you're not telling the students that it's good or</p> <p>22 bad.</p> <p>23 Q But if, as Mr. Meyer says, you have to change the</p> <p>24 definition of science for intelligent design to be</p> <p>25 considered science, is it good pedagogy to tell students</p>	<p style="text-align: right;">Page 160</p> <p>1 is science?</p> <p>2 A Correct.</p> <p>3 Q And if intelligent design is predicated on supernatural</p> <p>4 causation, is that a good thing to leave students with,</p> <p>5 is that a good idea to leave students with?</p> <p>6 MR. THOMPSON: I'll object to that. That's a</p> <p>7 pretty vague question, good idea to leave students with.</p> <p>8 BY MR. WALCZAK:</p> <p>9 Q Is that sound pedagogically, to leave students with the</p> <p>10 notion that a theory predicated on supernatural</p> <p>11 causation is a scientific alternative to evolution?</p> <p>12 A I mean, that's -- we're asking students to examine the</p> <p>13 evidence and weigh alternatives one against the other,</p> <p>14 asking students to assume some measure of control over</p> <p>15 their learning. That strikes me as a good practice.</p> <p>16 Q Are you aware of or can you identify any secular high</p> <p>17 school science textbooks that teach intelligent design?</p> <p>18 A That's a tall order. I mean, there are a lot of --</p> <p>19 Q You just have to give me one.</p> <p>20 A There are a lot of science textbooks.</p> <p>21 Q Are you familiar with a single science textbook, high</p> <p>22 school science -- secular high school science textbook</p> <p>23 that discusses intelligent design?</p> <p>24 A No.</p> <p>25 Q Are you familiar with any secular college or university</p>
<p style="text-align: right;">Page 159</p> <p>1 that this is a valid scientific alternative to</p> <p>2 intelligent -- to evolution?</p> <p>3 A I hesitated to answer because we don't know that -- I</p> <p>4 don't know that is in fact what Meyer says. This is</p> <p>5 what Linda Shaw says Meyer believes.</p> <p>6 Q Let's assume that intelligent design includes a</p> <p>7 supernatural causation, okay? Is it appropriate to</p> <p>8 introduce that in a biology class?</p> <p>9 MR. THOMPSON: Objection, assuming facts not in</p> <p>10 evidence, calls for a speculative answer.</p> <p>11 BY MR. WALCZAK:</p> <p>12 Q Go ahead.</p> <p>13 A Potentially.</p> <p>14 Q And potentially under what circumstances?</p> <p>15 A When you're introducing alternatives, intelligent design</p> <p>16 is one of those alternatives.</p> <p>17 Q If, assuming again, if it is based on supernatural</p> <p>18 causation, is it appropriate to tell students that it is</p> <p>19 a scientific alternative to evolution?</p> <p>20 A Potentially, yes. And continuing with the</p> <p>21 potentialities, there is a very -- there is a chance</p> <p>22 that as a result of reading what they read, students</p> <p>23 walk away with a better and perhaps a strong conviction</p> <p>24 about evolution.</p> <p>25 Q Or maybe they walk away thinking that intelligent design</p>	<p style="text-align: right;">Page 161</p> <p>1 biology textbook that discusses intelligent design?</p> <p>2 A No.</p> <p>3 Q Can you identify any evolutionary biologists who support</p> <p>4 intelligent design?</p> <p>5 A No.</p> <p>6 Q Can you identify any scientists as opposed to</p> <p>7 mathematicians, philosophers of science, or theologians</p> <p>8 who support intelligent design, that is, another way to</p> <p>9 say it, I think, are natural scientists?</p> <p>10 A My understanding is there are some of the expert</p> <p>11 witnesses who are scientists or practicing natural</p> <p>12 scientists.</p> <p>13 Q Do you know who they are?</p> <p>14 A My understanding is Professor Behe is a professor of</p> <p>15 biology. Dr. Minnich is a cell biologist or molecular</p> <p>16 biologist.</p> <p>17 Q Behe is a cell biologist. I don't know what Minnich is.</p> <p>18 Can you name any others?</p> <p>19 A No, not off the top of my head.</p> <p>20 Q Can you identify any secular high school science</p> <p>21 textbooks that discuss this controversy over evolution?</p> <p>22 A No.</p> <p>23 Q Can you identify any secular college or university</p> <p>24 biology textbooks that discuss this controversy over</p> <p>25 evolution?</p>

41 (Pages 158 to 161)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 162</p> <p>1 A No.</p> <p>2 Q Can you identify any science academies or societies that</p> <p>3 embrace this controversy over evolution?</p> <p>4 A "Embrace," what does that mean?</p> <p>5 Q That recognize this controversy over evolution?</p> <p>6 A I think they recognize it, they see it, they acknowledge</p> <p>7 it. Is that what you --?</p> <p>8 Q Yeah. Who can -- can you tell me which --</p> <p>9 A As we referenced earlier and now have forgotten twice to</p> <p>10 pull that page up, I had mentioned a moment ago that --</p> <p>11 Q Okay. We'll need to do that. And do you recall what it</p> <p>12 is specifically they say about the controversy? They</p> <p>13 say there's one out there?</p> <p>14 A Correct, it's a discussion of this is what's going on.</p> <p>15 Q Do they say it's out there in the scientific community</p> <p>16 or it's out there in the political community?</p> <p>17 A Not to be quoted, but I think it's the community at</p> <p>18 large.</p> <p>19 Q So not -- that wouldn't be the scientific community?</p> <p>20 A Correct.</p> <p>21 Q Are you familiar with any other science academies or</p> <p>22 societies or organizations that believe that there is a</p> <p>23 controversy within the scientific community over</p> <p>24 evolution?</p> <p>25 A I've not seen them firsthand in a published account, so</p>	<p style="text-align: right;">Page 164</p> <p>1 A Not off the top of my head, I'd have to go back and</p> <p>2 look.</p> <p>3 Q Could you provide me with that, provide your counsel</p> <p>4 with that information and then let me know?</p> <p>5 A Okay.</p> <p>6 Q Can you identify any peer-reviewed publications or</p> <p>7 journals that recognize this controversy over evolution?</p> <p>8 A I think Scott Campbell -- Angus Campbell, is that one of</p> <p>9 the experts?</p> <p>10 THE WITNESS: Which is it, Scott or Angus?</p> <p>11 MR. THOMPSON: Angus.</p> <p>12 A His report includes a paper, I believe, he published in</p> <p>13 a peer review journal talking about the controversy.</p> <p>14 BY MR. WALCZAK:</p> <p>15 Q You talk about gaps in the theory, in Darwin's theory.</p> <p>16 Or I'm sorry, the policy talks about gaps in Darwin's</p> <p>17 theory.</p> <p>18 What gaps do you believe need to be taught to</p> <p>19 students?</p> <p>20 A We talked about that a little bit earlier in the sense</p> <p>21 of macroevolution, how there appear to be gaps in the</p> <p>22 evolution from one species to another and so forth.</p> <p>23 That was the National Science Teachers Association.</p> <p>24 Q Can you tell me what the document is? Wait. We're now</p> <p>25 talk -- this is not the conference, this is the document</p>
<p style="text-align: right;">Page 163</p> <p>1 no.</p> <p>2 Q So you're not aware of any?</p> <p>3 A Other than what I've read in expert reports.</p> <p>4 Q Can you identify any science education academies,</p> <p>5 societies, organizations that recognize or acknowledge</p> <p>6 that there is a controversy over evolution within the</p> <p>7 scientific community?</p> <p>8 A How is that different than --</p> <p>9 Q Science education.</p> <p>10 A Thank you. Again, the people that I'm referencing, it</p> <p>11 could be science education, but it could be just</p> <p>12 science.</p> <p>13 Q Do you want to boot -- I don't know how long that takes</p> <p>14 to boot up your computer.</p> <p>15 A It takes just a minute or two.</p> <p>16 Q And then we can come back in a minute or two here.</p> <p>17 Can you identify any science education conferences</p> <p>18 that have discussed this alleged controversy over</p> <p>19 evolution?</p> <p>20 A In the literature review search that I did, I came</p> <p>21 across two presentations, two conference presentations</p> <p>22 that reference the debate or controversy or discussion.</p> <p>23 I'm not saying that the whole conference was devoted to</p> <p>24 it, but --</p> <p>25 Q Do you know who sponsored those conferences?</p>	<p style="text-align: right;">Page 165</p> <p>1 that acknowledges the controversy?</p> <p>2 A Yeah. There's a web page on the National Science</p> <p>3 Teachers Association.</p> <p>4 Q Okay.</p> <p>5 A The web page is under a tab, I think this is called</p> <p>6 education news, and they have a subcategory called</p> <p>7 curriculum.</p> <p>8 Q Um-hmm.</p> <p>9 A And they have various links talking about -- these</p> <p>10 appear to be talking about events in Kansas.</p> <p>11 Q So this is a news account?</p> <p>12 A Correct.</p> <p>13 Q Is there any mention in there of the science community</p> <p>14 discussing the controversy, this alleged controversy, or</p> <p>15 is it just about the Kansas Board's debating whether</p> <p>16 to --</p> <p>17 A Well, it's talking about the Kansas Board, and</p> <p>18 inevitably they're talking about inviting members of the</p> <p>19 science community to come in and be part of the hearings</p> <p>20 and so on and so forth. So inasmuch as it talks about</p> <p>21 that, it references the science community.</p> <p>22 Q But that's it, that's the only thing you can point to in</p> <p>23 everything you've looked at that the mainstream science</p> <p>24 community recognizes a controversy over evolution?</p> <p>25 A This and those things that were referenced as we talked</p>

42 (Pages 162 to 165)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 166</p> <p>1 about earlier.</p> <p>2 Q What's in the other experts' reports?</p> <p>3 A Right.</p> <p>4 Q So coming back, so the gap, you think the gaps and</p> <p>5 problems that need to be taught deal with</p> <p>6 macroevolution?</p> <p>7 A That's my understanding.</p> <p>8 Q And where do you get that understanding?</p> <p>9 A Just from, again, what I've read in preparation for</p> <p>10 this.</p> <p>11 Q And what is it that should be taught to fix those gaps</p> <p>12 and problems?</p> <p>13 A I beg your pardon?</p> <p>14 Q Do you know what it is -- how should the teaching be</p> <p>15 improved?</p> <p>16 A Specific to those gaps?</p> <p>17 Q Um-hmm.</p> <p>18 A I think at issue is helping students understand that</p> <p>19 those gaps exist.</p> <p>20 Q Should students suspect whether macroevolution actually</p> <p>21 takes place?</p> <p>22 A "Suspect," what does that mean?</p> <p>23 Q Do you disagree that macroevolution is a fact?</p> <p>24 A Well, that seems to be the central feature of our -- or</p> <p>25 a central feature of this argument.</p>	<p style="text-align: right;">Page 168</p> <p>1 is suspect?</p> <p>2 A "Suspect" is quite the word.</p> <p>3 Q Or did not occur?</p> <p>4 A I don't think anybody is saying that it did not occur in</p> <p>5 the classroom.</p> <p>6 Q I want to come back to critical thinking here. I don't</p> <p>7 mean to beat a dead horse.</p> <p>8 What are the elements of critical thinking? Is</p> <p>9 that the Petress elements?</p> <p>10 A Those are some elements, um-hmm.</p> <p>11 Q So some elements of critical thinking or some activities</p> <p>12 involved in critical thinking would include discussion?</p> <p>13 A Can, yes.</p> <p>14 Q Exchange of ideas?</p> <p>15 A Yes.</p> <p>16 Q And what are some things you would do to promote</p> <p>17 critical thinking in a classroom setting?</p> <p>18 A Well, ask questions like you see listed here in the</p> <p>19 report, asking questions --</p> <p>20 Q Asking questions of whom, asking questions of the</p> <p>21 students?</p> <p>22 A Students asking -- well, yeah, that's pretty broad.</p> <p>23 Students asking questions of other students, of the</p> <p>24 teacher, the teacher asking of the students, the</p> <p>25 students asking questions to themselves. Teachers could</p>
<p style="text-align: right;">Page 167</p> <p>1 Q What do you think?</p> <p>2 A I think various people have weighed in, the National</p> <p>3 Science Education Standards, the course text, et cetera,</p> <p>4 et cetera.</p> <p>5 Q Are you aware of any science foundation or academy that</p> <p>6 believes that macroevolution has not -- does not occur</p> <p>7 or has not occurred or that refutes the notion of</p> <p>8 macroevolution?</p> <p>9 A "Refutes," that's a pretty strong word. Not firsthand.</p> <p>10 Q There is a -- scientists continue to study the tempo and</p> <p>11 mechanisms of evolution.</p> <p>12 The question is can you point me to any science</p> <p>13 organization, academy, society that has taken the</p> <p>14 position that macroevolution does not occur?</p> <p>15 A No.</p> <p>16 Q Can you point me to any science education organization,</p> <p>17 academy, society that encourages or that has set out</p> <p>18 standards that students should be taught that</p> <p>19 macroevolution has not occurred?</p> <p>20 A Not specifically macroevolution. I mean, the National</p> <p>21 Science Education Standards -- the National Science</p> <p>22 Education Standards characterize evolution, details of</p> <p>23 human evolution as incomplete, but they don't</p> <p>24 necessarily identify macroevolution specifically.</p> <p>25 Q But that's a far cry from saying macroevolution itself</p>	<p style="text-align: right;">Page 169</p> <p>1 ask students to pose and answer questions in</p> <p>2 assignments. So I don't know if that answers your --</p> <p>3 Q So is that done alone or is that facilitated by the</p> <p>4 teacher?</p> <p>5 A Both.</p> <p>6 Q Can it be done just alone?</p> <p>7 A Um-hmm. I'm sorry, yes.</p> <p>8 Q Is it better done as a group?</p> <p>9 A Yes and no. Probably more on the no side.</p> <p>10 Q It's not better done as a group?</p> <p>11 A I think it's modeled in the group, but ultimately --</p> <p>12 Q What do you mean, modeled?</p> <p>13 A Modeled. The teacher models how one might think</p> <p>14 critically about something and then asks students to act</p> <p>15 likewise on their own.</p> <p>16 Q So is it -- I mean, is it good pedagogy to just throw</p> <p>17 out an idea and then not discuss it and say, "Here, go</p> <p>18 think about this critically"?</p> <p>19 A Potentially.</p> <p>20 Q It is?</p> <p>21 A Potentially.</p> <p>22 Q Give me an example?</p> <p>23 A You've modeled critical thinking to your students and</p> <p>24 now you're asking them to apply it on their own. And</p> <p>25 you do that for two, if not more, reasons, two that come</p>

43 (Pages 166 to 169)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 170</p> <p>1 to mind specifically. One is you want to be able to</p> <p>2 assess their ability to do it, so it's a form of</p> <p>3 assessment. And then the second is you want them to be</p> <p>4 able to do in this case critical thinking, but you</p> <p>5 eventually want them to be able to habituate certain</p> <p>6 skills and behaviors, and if they never do it on their</p> <p>7 own, then they don't -- or they may not reach that level</p> <p>8 of habituation.</p> <p>9 Q How do you know if they've done it, how do you know if</p> <p>10 they've done it at all?</p> <p>11 A Well, that's what I mean, that's why you'd want them to</p> <p>12 do it on their own. To do it at all, they would have to</p> <p>13 complete some sort of analysis. Typically, in the</p> <p>14 classic sense, that's done through a written document,</p> <p>15 sometimes it's a presentation, sometimes it's an</p> <p>16 experiment, whatever, but --</p> <p>17 Q This is the modeling, or this is the --</p> <p>18 A No, no. This is the on their own so that you can assess</p> <p>19 it. So you can --</p> <p>20 Q So they give you something back?</p> <p>21 A Some product that indicates they can or have done it.</p> <p>22 Q So it's a test or a paper or --</p> <p>23 A Or a presentation or an experiment or something.</p> <p>24 Q And how do you do that if you don't get anything in</p> <p>25 response from the students?</p>	<p style="text-align: right;">Page 172</p> <p>1 A Right, I was about to say, I wouldn't say nobody.</p> <p>2 Q So it's you're sort of letting out this idea and not</p> <p>3 guiding the students in the learning process after that?</p> <p>4 A That's no different than all -- or not all, but a</p> <p>5 multitude or a host of other things that kids are</p> <p>6 reading and analyzing and critiquing on their own and</p> <p>7 that they may have heard in the classroom or read in a</p> <p>8 curricular context that is not taught explicitly and</p> <p>9 tested, but they hear it or they read about it and they</p> <p>10 go out and find out more information about it on their</p> <p>11 own, and that may have originated at the school.</p> <p>12 Q I think I asked you before if you were familiar with the</p> <p>13 Discovery Institute?</p> <p>14 A Right, you did.</p> <p>15 Q And they are one of the chief proponents of intelligent</p> <p>16 design theory, do you know that, or --</p> <p>17 A If you say so, I understand that that's --</p> <p>18 Q You don't know that or --</p> <p>19 A I understand that that is a part of their -- what they</p> <p>20 do.</p> <p>21 (Exhibit Number 7 was marked for identification.)</p> <p>22 BY MR. WALCZAK:</p> <p>23 Q I show you what's been marked as Exhibit 7.</p> <p>24 Have you seen this before?</p> <p>25 A No.</p>
<p style="text-align: right;">Page 171</p> <p>1 A One way could potentially be a discussion. That's</p> <p>2 called -- that's -- we call that informal assessment.</p> <p>3 Teachers often will use informal assessment in the</p> <p>4 classroom as a way to know whether or not students can</p> <p>5 defend a position or analyze something critically and so</p> <p>6 forth.</p> <p>7 Q So there has to be some follow-up by the teacher to</p> <p>8 assess, one, whether the student has done it, two, if</p> <p>9 they have done it and if they have employed appropriate</p> <p>10 methodology?</p> <p>11 A Ideally, right.</p> <p>12 Q So if you need an assessment aspect, how is the Dover</p> <p>13 policy good pedagogy? Because there's no assessment</p> <p>14 aspect to that.</p> <p>15 A They're assessing what they're teaching in class, that's</p> <p>16 what they're assessing.</p> <p>17 Q But here they've introduced this label for a concept and</p> <p>18 then there's no follow-up.</p> <p>19 Now, how is that good pedagogy?</p> <p>20 A To encourage students to think critically doesn't mean</p> <p>21 that you assess it in every single domain.</p> <p>22 Q So they could go out and do all sorts of wacky things?</p> <p>23 A All sorts of insidious critical thinking.</p> <p>24 Q And there's nobody to correct them? Or the school is</p> <p>25 not correcting them?</p>	<p style="text-align: right;">Page 173</p> <p>1 Q Do you want to take a moment and read it to yourself?</p> <p>2 A Okay.</p> <p>3 Okay.</p> <p>4 Q How would you reconcile this with your opinion that this</p> <p>5 policy is good pedagogy?</p> <p>6 MR. THOMPSON: That's a very vague question.</p> <p>7 Reconcile what?</p> <p>8 BY MR. WALCZAK:</p> <p>9 Q This seems to say that the Dover policy is the wrong way</p> <p>10 to go about it, it has a number of problems, lacks</p> <p>11 clarity. The policy is incoherent. Should be withdrawn</p> <p>12 and rewritten.</p> <p>13 MR. THOMPSON: This is a press release.</p> <p>14 MR. WALCZAK: Right. By the Discovery Institute.</p> <p>15 I don't have to tell you the Discovery Institute's</p> <p>16 relationship to intelligent design and what we're</p> <p>17 talking about in this case.</p> <p>18 BY MR. WALCZAK:</p> <p>19 Q So I'm just asking if you have any reaction to this</p> <p>20 criticism of the Dover policy and how you would rebut</p> <p>21 it?</p> <p>22 A Well, I hesitate to rebut a press release. I would be</p> <p>23 much more interested in having some extended discussion</p> <p>24 with him about it.</p> <p>25 Q Well, do the best you can.</p>

44 (Pages 170 to 173)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 174</p> <p>1 MR. THOMPSON: Again, I object to this because it</p> <p>2 is -- you're asking him to rebut something that's in a</p> <p>3 press release that's hearsay that's quoting a particular</p> <p>4 member of the Discovery Institute. We really don't know</p> <p>5 the context of how those statements were made and why</p> <p>6 they were made.</p> <p>7 BY MR. WALCZAK:</p> <p>8 Q Well, forget that this is in a document. The charge is</p> <p>9 that Dover's policy lacks clarity. At one point it</p> <p>10 appears to prohibit Dover Schools from teaching anything</p> <p>11 about the origins of life, and at another point it</p> <p>12 appears to both mandate as well as prohibit the teaching</p> <p>13 of the scientific theory of intelligent design.</p> <p>14 What's your response to that criticism?</p> <p>15 A Well, obviously, I would disagree with some of it.</p> <p>16 Q Explain that?</p> <p>17 A In the sense that I don't -- I don't know what they mean</p> <p>18 by mandate the teaching of intelligent design, I don't</p> <p>19 know what they mean by that. So that would be a</p> <p>20 criticism. Again, they say we don't think intelligent</p> <p>21 design should be required. It's not required.</p> <p>22 Q The sources you cited in your report, in your first</p> <p>23 report, not the rebuttal report, and you cite what, six</p> <p>24 or seven sources there?</p> <p>25 A Um-hmm.</p>	<p style="text-align: right;">Page 176</p> <p>1 A A sense of the Senate.</p> <p>2 Q Was that adopted by the Senate, was there a vote on</p> <p>3 that?</p> <p>4 A It was entered into the Congressional Record.</p> <p>5 Q Was there a vote on it?</p> <p>6 A I don't believe so.</p> <p>7 Q So when you say in your report "as adopted by the United</p> <p>8 States Senate," is that correct?</p> <p>9 MR. THOMPSON: I think the record will speak for</p> <p>10 itself. I don't want him to go astray and --</p> <p>11 MR. WALCZAK: Well, I want him to answer that</p> <p>12 because he's saying something in his report that I'm not</p> <p>13 sure is accurate, and I'd like to --</p> <p>14 MR. THOMPSON: I know what the accurate statement</p> <p>15 is, and he may be inaccurate about saying it was not</p> <p>16 voted on --</p> <p>17 MR. WALCZAK: I'd like to give him an opportunity,</p> <p>18 since this is all under oath, to be able to make a</p> <p>19 correction there.</p> <p>20 BY MR. WALCZAK:</p> <p>21 Q So is that really accurate to say "as adopted by the</p> <p>22 United States Senate"?</p> <p>23 A I don't know that to be accurate or inaccurate.</p> <p>24 Q You worked as -- what was your position in Focus on the</p> <p>25 Family?</p>
<p style="text-align: right;">Page 175</p> <p>1 Q Those are all what I'll call general educational</p> <p>2 sources, kind of what is good education, standards for</p> <p>3 good education, is that a fair assessment?</p> <p>4 A The Pennsylvania standards, I don't know if I'd</p> <p>5 classify -- the standards are the standards.</p> <p>6 Q Right. Besides the Pennsylvania standards, the other</p> <p>7 citations are to folks who worked generally in the</p> <p>8 education field as opposed to science education?</p> <p>9 A Assuming the science educators would be included under</p> <p>10 that general, yes.</p> <p>11 Q But the folks you cited are not science educators?</p> <p>12 A I don't know that for a fact. I don't know all of their</p> <p>13 backgrounds.</p> <p>14 Q Do any of those sources specifically support introducing</p> <p>15 the concept of intelligent design to students?</p> <p>16 A Not by name.</p> <p>17 Q Do any of those sources encourage teaching the</p> <p>18 controversy around evolution?</p> <p>19 A I don't think so.</p> <p>20 Q One of your sub-opinions is that the policy is</p> <p>21 educationally sound because it is in accordance with the</p> <p>22 Santorum Amendment.</p> <p>23 Do you know what the Santorum Amendment is?</p> <p>24 A Yes.</p> <p>25 Q What is it, legally speaking?</p>	<p style="text-align: right;">Page 177</p> <p>1 A A policy analyst.</p> <p>2 Q And you did a lot of work in Washington?</p> <p>3 A That would be a stretch.</p> <p>4 Q You did a lot of work on federal legislation?</p> <p>5 A "A lot" would be a stretch, too.</p> <p>6 Q You did some work on federal legislation?</p> <p>7 A "Some" might be a better description.</p> <p>8 Q And you have written about the No Child Left Behind law?</p> <p>9 A A little bit.</p> <p>10 Q And you have some familiarity with how Congress works?</p> <p>11 A Correct.</p> <p>12 Q And a sense of the Senate or an entry in the</p> <p>13 Congressional Record is not a law?</p> <p>14 A It was --</p> <p>15 Q Correct?</p> <p>16 A Correct, it was not signed into law.</p> <p>17 Q It's not a statute, correct?</p> <p>18 A Correct.</p> <p>19 Q It's not a federal regulation, correct?</p> <p>20 A Correct.</p> <p>21 Q It has absolutely no force and effect of law, correct?</p> <p>22 A Um-hmm. I'm sorry, yes.</p> <p>23 Q So it's a reflection of a view by one, sometimes more,</p> <p>24 members of Congress?</p> <p>25 A A sense of the Senate.</p>

45 (Pages 174 to 177)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 178</p> <p>1 Q Is it a sense of the Senate or is it --</p> <p>2 A That's my understanding.</p> <p>3 Q And are you familiar with the No Child Left Behind Act?</p> <p>4 A Am I familiar with its existence?</p> <p>5 Q Yeah.</p> <p>6 A Correct.</p> <p>7 Q And you've written about No Child Left Behind?</p> <p>8 A A little bit, as I said earlier.</p> <p>9 Q Are you familiar with the contents of the legislation?</p> <p>10 A Well, it's 1,400 pages, so I don't know every bit of it.</p> <p>11 Q Do you know whether it mentions intelligent design?</p> <p>12 A I do not believe it does.</p> <p>13 Q Do you know whether it mentions evolution?</p> <p>14 A I don't know that for a fact whether it does or does</p> <p>15 not.</p> <p>16 Q Do you know whether it mentions biology?</p> <p>17 A The word "biology"?</p> <p>18 Q Yeah.</p> <p>19 A It might. But --</p> <p>20 Q You don't know that?</p> <p>21 A I'd have to go back and look.</p> <p>22 Q Are you aware of any federal statute that either</p> <p>23 requires or encourages the teaching of intelligent</p> <p>24 design?</p> <p>25 A No.</p>	<p style="text-align: right;">Page 180</p> <p>1 testimony?</p> <p>2 A Well, as I said earlier, I think it would be helpful to</p> <p>3 read other depositions.</p> <p>4 Q Depositions or reports?</p> <p>5 A Well, if there are more reports coming, that would be</p> <p>6 helpful, but depositions, as well.</p> <p>7 Q The depositions of the experts?</p> <p>8 A Yes.</p> <p>9 Q Anything else?</p> <p>10 A There probably will be, but I would be speculating at</p> <p>11 this point.</p> <p>12 Q So as we sit here right now, you can't think of anything</p> <p>13 else that you really think should be done to support</p> <p>14 your opinion?</p> <p>15 MR. THOMPSON: I'll object to that, that's a pretty</p> <p>16 vague, ambiguous question.</p> <p>17 MR. WALCZAK: That was pretty clear.</p> <p>18 MR. THOMPSON: Support his opinion where?</p> <p>19 MR. WALCZAK: His opinion in this case. He has</p> <p>20 rendered an expert opinion.</p> <p>21 BY MR. WALCZAK:</p> <p>22 Q Is there anything else that you can think of as you sit</p> <p>23 here right now that you feel that you should or will do</p> <p>24 to buttress your opinion in this case?</p> <p>25 A Well, I may re-read things that I've read, facts about</p>
<p style="text-align: right;">Page 179</p> <p>1 Q Are you aware of any federal regulation that requires or</p> <p>2 encourages the teaching of intelligent design?</p> <p>3 A No.</p> <p>4 Q Are you aware of any federal statute or regulation that</p> <p>5 encourages or requires teaching the, quote, unquote,</p> <p>6 controversy around evolution?</p> <p>7 A No.</p> <p>8 Q Is there anything else that you think needs to be done</p> <p>9 for you to -- between now and when you testify at trial?</p> <p>10 A Well, I don't think my answer is substantively different</p> <p>11 than what we talked about before. Because I haven't</p> <p>12 done that, I don't know how to answer that. So</p> <p>13 inevitably, I'm sure that I will be doing some more</p> <p>14 reading and whatnot, but --</p> <p>15 Q Do you feel there's other things you need to do to</p> <p>16 support your opinion in this case?</p> <p>17 A Again, it's similar to what I've already said. I assume</p> <p>18 you mean in preparation for trial.</p> <p>19 Q Right.</p> <p>20 A It's not -- again, it's not different than what I talked</p> <p>21 about earlier in the sense that --</p> <p>22 Q Well, we've now had many hours and you've heard the</p> <p>23 questions that I've been asking.</p> <p>24 Are there things that you feel it would be prudent</p> <p>25 for you to investigate in order to support your</p>	<p style="text-align: right;">Page 181</p> <p>1 the case, so forth.</p> <p>2 Q Anything that you haven't read that you're going to</p> <p>3 read?</p> <p>4 A Potentially, but I have no way of knowing what it would</p> <p>5 be.</p> <p>6 Q Can you advise your lawyer when you finish doing</p> <p>7 whatever additional work you're going to do and advise</p> <p>8 him what it is that you've done, and then I would ask</p> <p>9 him to advise us within the Rule 26(b)(4) framework so</p> <p>10 we can decide whether we need to resume this deposition</p> <p>11 to assess your additional work?</p> <p>12 A Are you asking me can I?</p> <p>13 Q Will you let him know what it is --</p> <p>14 A If that's the procedure, certainly.</p> <p>15 MR. WALCZAK: Is that okay?</p> <p>16 MR. THOMPSON: Yes.</p> <p>17 (Exhibit Number 8 was marked for identification.)</p> <p>18 BY MR. WALCZAK:</p> <p>19 Q I show you what's been marked as Exhibit 8.</p> <p>20 Does this look familiar?</p> <p>21 A Yes.</p> <p>22 Q Did you have anything to do with this?</p> <p>23 A The vials?</p> <p>24 Q Yeah.</p> <p>25 A Yes.</p>

46 (Pages 178 to 181)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

Page 182

1 Q What did you do with it? Is this your vita?

2 A Correct.

3 Q Let's start with your education. Can you identify for

4 me anything in your education that relates to science

5 education?

6 A It would include courses on curriculum and pedagogy,

7 assessment --

8 Q Let's get a little more detail here.

9 A Sure. Courses around curriculum and pedagogy --

10 Q Where are we talking about here?

11 A Oh, I'm sorry. Well, all three of them. I mean, there

12 were classes and courses related to curriculum and

13 pedagogy in all three of those degree programs.

14 Q But specifically about science education?

15 A It would be about education generally.

16 Q Generally?

17 A Correct.

18 Q And is there a discussion of science education?

19 A Occasionally there will be.

20 Q Did you take courses in any of these places specifically

21 on science education?

22 A On science, yes. Science education, no.

23 Q What science courses did you take and where? I didn't

24 think there was a whole lot of them.

25 A Let's see. Certainly biology in the --

Page 183

1 Q Where was that?

2 A -- undergraduate program.

3 Q How many semesters of that did you take?

4 A Two semesters of that.

5 Q Was that an intro or an advanced course?

6 A I think it was the 100 series, you know, probably the

7 intro and then the follow-up to it. I think that's it.

8 Q So two semesters of biology at University of Colorado?

9 A Correct.

10 Q What's BME there?

11 A Bachelor of Music Education.

12 Q So you were a music education major?

13 A Um-hmm, in my first degree.

14 Q I'm sorry?

15 A In the first degree.

16 Q Is that like homicide in the first degree?

17 A It seemed like it at times.

18 Q What does that mean, in the first degree?

19 A The first degree as opposed to the Master's and the

20 Ph.D.

21 Q Did you have a minor?

22 A In which one of those?

23 Q Undergraduate?

24 A No.

25 Q Did you take any science classes at Colorado Springs in

Page 184

1 your Master's program?

2 A No.

3 Q Did you take any science education classes?

4 A No.

5 Q How about in the Ph.D. program?

6 A No.

7 Q No to both science and science education?

8 A Correct.

9 Q I want to work up from the -- under professional

10 experience starting with the oldest.

11 Did you teach at Cheyenne Mountain High School any

12 science classes?

13 A No.

14 Q Were you involved in any science clubs?

15 A No.

16 Q Did you have anything to do with science there?

17 A No.

18 Q How about as a school administrator at Cheyenne Mountain

19 Charter Academy, anything to -- did you teach any

20 science classes?

21 A No.

22 Q Were you involved with the science curriculum at all?

23 A I was involved with all the curriculum.

24 Q And what did you do?

25 A Well, it was a little bit of a lot of things. One was

Page 185

1 working with teachers to ensure that the curriculum was

2 aligned with standards. Making sure that assessments

3 were aligned with lessons, making sure that lessons were

4 clear in objectives, evaluating teachers as they taught

5 lessons.

6 Q What kind of school is Cheyenne Mountain Charter

7 Academy?

8 A That's a charter -- public charter school.

9 Q It's not a parochial school?

10 A No.

11 Q Did they teach intelligent design there?

12 A No.

13 Q Why not?

14 A It's not in the Colorado standards.

15 Q When you were Assistant to the Vice Chancellor for

16 Economic Affairs at University of Colorado, did you

17 teach any science classes?

18 A No.

19 Q Did you have anything to do with the science curriculum?

20 A No.

21 Q How about as an adjunct professor at Colorado Christian

22 University, did you teach any science classes?

23 A No.

24 Q What did you teach?

25 A As it says there, a little bit of technology, higher

47 (Pages 182 to 185)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 186</p> <p>1 education, assessment, program evaluation.</p> <p>2 Q So you didn't teach science.</p> <p>3 Did you teach any science education classes?</p> <p>4 A No.</p> <p>5 Q As an education policy analyst at Focus on the Family,</p> <p>6 were you involved in any science-related issues?</p> <p>7 A No.</p> <p>8 Q Were you involved in any science education issues?</p> <p>9 A No.</p> <p>10 Q What kind of organization is Focus on the Family?</p> <p>11 A Focus is a Christian ministry.</p> <p>12 Q And your current job, I assume, is still at University</p> <p>13 of Colorado, Colorado Springs?</p> <p>14 A Correct.</p> <p>15 Q Have you ever taught any science education classes?</p> <p>16 A No.</p> <p>17 Q And I note on the course listing there are thirteen</p> <p>18 science education classes at Colorado Springs, and you</p> <p>19 don't teach any of those?</p> <p>20 A Correct.</p> <p>21 Q And you've never taught any of those?</p> <p>22 A That's right.</p> <p>23 Q Have you talked to any of the professors who teach those</p> <p>24 courses about intelligent design?</p> <p>25 A No.</p>	<p style="text-align: right;">Page 188</p> <p>1 Q Okay. Is there anything in peer-reviewed, invited, or</p> <p>2 non-peer-reviewed that relates to science education?</p> <p>3 A No.</p> <p>4 Q Anything that relates to science?</p> <p>5 A No.</p> <p>6 Q Have you ever made a presentation at a science academy,</p> <p>7 society, organization?</p> <p>8 A No.</p> <p>9 Q Have you ever made a presentation at a science education</p> <p>10 organization, academy, society?</p> <p>11 A No.</p> <p>12 Q I note in some of the introductions of you, notably in</p> <p>13 this Love Won Out program, it refers to you as an</p> <p>14 award-winning teacher, principal, public policy analyst,</p> <p>15 and college professor.</p> <p>16 A Um-hmm.</p> <p>17 Q What awards did you win as a teacher?</p> <p>18 A They're talking specifically about teacher. The award</p> <p>19 does not apply to the whole string of things.</p> <p>20 Q What does the award apply to?</p> <p>21 A Teaching.</p> <p>22 Q Teaching?</p> <p>23 A Correct. That's what I'm saying, it doesn't apply to</p> <p>24 all the things that come after it.</p> <p>25 Q It doesn't?</p>
<p style="text-align: right;">Page 187</p> <p>1 Q Do you know whether any of those professors teach</p> <p>2 intelligent design as part of the science education</p> <p>3 curriculum?</p> <p>4 A I don't know.</p> <p>5 Q Did any of your lawyers tell you not to speak to those</p> <p>6 folks?</p> <p>7 A Not -- no, they did not.</p> <p>8 Q Let's look at related experiences. Anything you can</p> <p>9 point to that relates to science?</p> <p>10 A No.</p> <p>11 Q Science education?</p> <p>12 A No.</p> <p>13 Q Rather than go through these publications one by one,</p> <p>14 can you point me to any that relate to science</p> <p>15 education?</p> <p>16 A No.</p> <p>17 Q Can you point me to any that discuss intelligent design?</p> <p>18 A No.</p> <p>19 Q Can you point me to any that discuss the teaching of</p> <p>20 evolution?</p> <p>21 A No, I don't think so.</p> <p>22 Q Let's look at presentations. Is it easier if I take all</p> <p>23 of the presentations together because the answer is</p> <p>24 going to be the same?</p> <p>25 A That would be best.</p>	<p style="text-align: right;">Page 189</p> <p>1 A Correct.</p> <p>2 Q But it applies to teacher?</p> <p>3 A Teacher.</p> <p>4 Q And so what award did you win as a teacher?</p> <p>5 A To be named amongst Who's Who of America's Teachers.</p> <p>6 Q When was that?</p> <p>7 A '99, '98, '97, '95, and '94.</p> <p>8 Q Is that on your CV here?</p> <p>9 A It is.</p> <p>10 Q So you have not won awards for being a principal?</p> <p>11 A Correct. Or any of the others, right.</p> <p>12 Q Have you ever taught science teaching methods to</p> <p>13 pre-service teachers?</p> <p>14 A No.</p> <p>15 Q Have you ever taught science teaching methods to</p> <p>16 in-service teachers?</p> <p>17 A No.</p> <p>18 Q Have you ever done any research on science education?</p> <p>19 A No.</p> <p>20 Q What can you point to in your background that helps you</p> <p>21 to decide what should be taught in science classes?</p> <p>22 A It would be training in and experience in educational</p> <p>23 leadership, curriculum, pedagogy, and so forth.</p> <p>24 Q So the general educational background?</p> <p>25 A Right. People who work in educational leadership,</p>

48 (Pages 186 to 189)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

<p style="text-align: right;">Page 190</p> <p>1 people who are principals, are by necessity generalists.</p> <p>2 MR. WALCZAK: Let's take a five-minute break. I</p> <p>3 think I'm done.</p> <p>4 (Short recess.)</p> <p>5 BY MR. WALCZAK:</p> <p>6 Q I want to go back. I don't think I covered this minor</p> <p>7 point. I asked the follow-up questions, but not the</p> <p>8 initial question.</p> <p>9 Implicit in your report is that it is good to alert</p> <p>10 students to the fact that there is a controversy in the</p> <p>11 science community, is that correct?</p> <p>12 A I'm sorry, ask it again.</p> <p>13 Q Let me direct you to page 3 of your initial report, the</p> <p>14 fourth paragraph. "Fourth, drawing students' attention</p> <p>15 to weaknesses, gaps, and problems in evolutionary theory</p> <p>16 is a simple matter of accuracy, a basic premise of any</p> <p>17 instruction. The course text itself acknowledges the</p> <p>18 controversy surrounding evolution under a section</p> <p>19 entitled 'Strengths and Weaknesses of Evolutionary</p> <p>20 Theory.'"</p> <p>21 When you say "course text," what do you mean by</p> <p>22 that?</p> <p>23 A The book that's used in the course.</p> <p>24 Q The one page that you read?</p> <p>25 A The book, right.</p>	<p style="text-align: right;">Page 192</p> <p>1 they do research on the interactions, the actions and</p> <p>2 interactions between people typically, and</p> <p>3 they're -- and sometimes the interactions as a result of</p> <p>4 environment and so on and so forth.</p> <p>5 Q But that doesn't sound like a controversy in the</p> <p>6 scientific community.</p> <p>7 A What?</p> <p>8 Q What you just described.</p> <p>9 A Sociology?</p> <p>10 Q Well, what you just described did not sound like</p> <p>11 a -- what is it there that's controversial about</p> <p>12 evolution?</p> <p>13 MR. THOMPSON: I think he was trying to describe</p> <p>14 what he meant by natural. Is that --</p> <p>15 THE WITNESS: Yeah.</p> <p>16 A Right, you had asked me what do you mean by natural, and</p> <p>17 I'm saying --</p> <p>18 BY MR. WALCZAK:</p> <p>19 Q Actually, I asked what you meant by sociological. It's</p> <p>20 been a long day and we're all tired.</p> <p>21 I'm trying to understand the controversy that you</p> <p>22 allude to in the scientific community, what precisely is</p> <p>23 that controversy?</p> <p>24 A At issue is, as I referenced several people, this idea</p> <p>25 of -- I think Sober and Steel talk about the idea of</p>
<p style="text-align: right;">Page 191</p> <p>1 Q What is the controversy in the scientific community?</p> <p>2 A The science standards called it incomplete, this -- the</p> <p>3 authors that I reference, Sober and Steel, this</p> <p>4 discussion of testing assumptions, that issue that they</p> <p>5 raise.</p> <p>6 Q I don't think that it's controversial that evolution is</p> <p>7 incomplete. I mean, no theory is complete and may ever</p> <p>8 be complete, no scientific theory.</p> <p>9 Is that the controversy that you're referring to?</p> <p>10 A That's at the center of the controversy in addition to</p> <p>11 the fact that there are other alternatives, people</p> <p>12 proposing other alternatives, and should these</p> <p>13 have -- these alternatives have cache and so on and so</p> <p>14 forth.</p> <p>15 Q And the alternatives involve -- how are they</p> <p>16 alternatives?</p> <p>17 A Alternative explanations to natural organisms, the</p> <p>18 development therein.</p> <p>19 Q So natural versus supernatural?</p> <p>20 A No, I'm just using the terms that we've used all day.</p> <p>21 Natural versus sociological.</p> <p>22 Q What's sociological?</p> <p>23 A What is sociological?</p> <p>24 Q Yeah, what does that mean?</p> <p>25 A Sociologists, anthropologists, educational researchers,</p>	<p style="text-align: right;">Page 193</p> <p>1 assumptions, there are these assumptions that are</p> <p>2 engrained within the scientific community and there are</p> <p>3 others who challenge those assumptions.</p> <p>4 Q And the assumptions that are being challenged are what,</p> <p>5 that science has to be naturalistic or materialistic?</p> <p>6 A No. They're challenging the assumptions, particularly</p> <p>7 assumptions about evolution that are kind of central.</p> <p>8 Q And what are those assumptions?</p> <p>9 A Well, Sober and Steel talk about common ancestry as the</p> <p>10 example.</p> <p>11 Q So the controversy in the scientific community that you</p> <p>12 refer to is about common ancestry?</p> <p>13 A The controversy is the idea of challenging assumptions</p> <p>14 implicit in evolution and the various subcategories</p> <p>15 within evolution.</p> <p>16 Q And the one specific that you've identified is common</p> <p>17 ancestry?</p> <p>18 A Correct, that's the one I referenced with Sober and</p> <p>19 Steel.</p> <p>20 Q I'm sure I've missed things, but I'm too tired to go on.</p> <p>21 And I want to catch my flight. So we'll see you in</p> <p>22 September, although you're going to get me information</p> <p>23 about the conferences that recognize the controversy?</p> <p>24 A Correct.</p> <p>25 Q And you're going to let your counsel know, who will let</p>

49 (Pages 190 to 193)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

Page 194

1 me know, if you do a substantial amount of additional
2 reading or work to prepare your testimony?

3 A Correct.

4 Q And to the extent your opinion changes, you'd have to
5 modify it.

6 A A report? Okay.

7 Q I know you look forward to that.

8 MR. WALCZAK: Do you want to talk about signing?
9 Do you want to sign or waive?

10 MR. THOMPSON: That's up to you. I'm not --

11 MR. WALCZAK: You know what? It's the witness's
12 prerogative.

13 MR. THOMPSON: Do you want to waive the reading and
14 signing of the deposition?

15 It would probably make it faster, right?

16 MR. WALCZAK: It does make it faster. You can't
17 make substantive changes, but if there's something -- in
18 the unlikely case that our court reporter made a
19 mistake --

20 THE WITNESS: That if Beth is a slacker.

21 MR. THOMPSON: We can always -- it's not going to
22 change what's put down on the paper.

23 MR. WALCZAK: Right. I mean, it's certainly your
24 prerogative to waive that. Okay. We're done.

25 (Deposition concluded at 4:13 p.m.)

Page 195

1 State of Michigan)

2 County of Oakland)

3 Certificate of Notary Public - Court Reporter

4

5 I do hereby certify that the witness, whose attached
6 testimony was taken in the above-entitled matter, was first
7 duly sworn to tell the truth; the testimony contained herein
8 was reduced to writing in the presence of the witness by
9 means of stenography; afterwards transcribed; and is a true
10 and complete transcript of the testimony given by the
11 witness.

12

13 I further certify that I am not connected by blood or
14 marriage with any of the parties; their attorneys or agents;
15 and that I am not interested, directly or indirectly, in the
16 matter of controversy.

17

18 In witness whereof, I have hereunto set my hand at Troy,
19 Michigan, County of Oakland, State of Michigan.

20 Dated: May 21, 2005

21

22 

23 Elizabeth G. LaBarge, CSR-4467

24 Certified Shorthand Reporter

25 Notary Public, Wayne County, Michigan

50 (Pages 194 to 195)

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

A				
AAAS 58:6,9	92:1,4,7,10 93:1	academy 55:11,17	adds 88:13	159:17 163:10
103:12	93:15 94:1,4,20	55:20,23,24,25	adjunct 185:21	166:9 174:1,20
ability 12:13 113:14	94:23,25 95:4,10	56:2,7,12,22 57:3	administration	179:17,20 190:12
113:19 170:2	95:11 97:13,25	57:11,14,18,24	97:17	against 83:2 111:12
able 7:15 67:6,11	98:1 99:6,13	62:2 102:16 167:5	administrator 65:25	111:13 151:23
76:19,19 109:16	100:9,9 101:21	167:13,17 184:19	184:18	160:13
111:11 126:1,9,18	102:11,17 103:5,6	185:7 188:6,10	administrators	age 66:15
126:21 127:2	104:18 106:4	accord 157:22	65:16	agency 144:10
130:6 138:8	107:7 108:11	accordance 175:21	admonition 79:8,9	agenda 104:7
151:18 157:24	109:6,7 115:9,10	according 13:13	79:10,14 88:10	agent 145:24 147:8
170:1,4,5 176:18	115:13,15,17	130:6 133:24	105:14	147:8
abortions 129:23	118:15 119:24	140:15	admonitions 88:2	agents 195:14
139:19	120:4 122:3	account 24:17,18	adopted 130:19	ago 42:14 96:13
about 7:2,15 8:12	123:19 124:12,19	100:19 153:25	176:2,7,21	162:10
9:14,17,24 10:14	125:2,9,17 126:5	162:25 165:11	adult 76:13	agree 31:4 50:16,17
10:15 11:3,16	126:10 128:23	accuracy 16:20 81:3	advance 9:14 16:6	74:3 107:15,21
12:6,7,15,18,21	130:9,9,10 131:7	116:22,23 120:12	advanced 36:7	108:1,2 111:24
12:24 13:22 16:6	133:21 134:9,15	190:16	116:25 136:7	112:1 116:9
16:16,17 19:20	134:19,24 135:5	accurate 41:19	183:5	117:23 127:21
20:3 23:5,9,16	135:10,14,24	110:9 115:8 116:1	Advancement 58:11	agreed 17:13 44:15
24:24,25 25:6,12	136:2,4 137:8,12	116:16,20 119:11	advantage 92:17,20	44:17
26:6 29:4,19	137:18,20 140:2	120:6,22,22 121:2	advise 17:15 181:6	agreement 25:18
30:14 31:1,7,16	140:13,16,17,25	121:5,15,21 124:4	181:7,9	ahead 11:10 12:3
31:24 32:5,7,13	142:8 144:5,6,6	124:11 138:5	Affairs 185:16	16:10 82:11
32:15 34:20 35:3	145:3,10,11	176:13,14,21,23	afield 79:23	106:15 115:1
35:8 36:10,18,24	147:21,25 148:19	accurately 115:24	aforementioned	118:23 138:20
37:3,19 38:5,7,9	149:15 150:2,15	achievement 136:1	84:22	158:10 159:12
39:3,15,18 40:8	152:10,13,15	acknowledge 162:6	afraid 129:24	aid 109:4 130:2
40:13,16,17,22	153:7 157:11	163:5	after 5:14 21:17,18	aides 66:13
41:6,18 42:1,2	159:24 162:12	acknowledged	27:17 28:8 31:25	al 100:22 108:13
43:6 44:7 45:11	164:13,15,16,20	51:12	33:13 59:16,18,19	alert 190:9
45:22 46:2 47:10	165:9,10,15,17,18	acknowledges 165:1	90:19 172:3	alerting 127:11,12
47:14,16 48:10,23	165:20 166:1	190:17	188:24	127:14 129:1
50:2,14,25 51:1	169:14,18 172:1,9	across 50:12 154:16	afternoon 34:21	134:21
51:12,15,20,24	172:10 173:10,17	154:23 163:21	afterwards 195:9	align 155:11
52:1,11 53:15	173:24 174:11	act 169:14 178:3	again 11:19 18:20	aligned 13:6 66:14
55:3 56:7 57:20	176:15 177:8	actions 36:21 192:1	27:7,11 33:3	66:16 67:22 185:2
58:11 60:6,12	178:7 179:11,21	actively 157:20	34:16 36:19,25	185:3
61:14,17 62:25	180:25 182:10,14	activities 67:10	37:13 43:6 45:5	aligning 155:19
63:4 64:7,16,19	182:15 184:5,18	155:19 168:11	46:18 50:2,5,14	alignment 16:18,19
65:4,5 66:7 69:11	185:21 186:24	actually 4:16 24:12	50:25 52:21 54:3	155:22
69:23 70:2 71:20	188:18 192:11,25	47:21 65:1 79:1	57:5 58:5 59:12	alleged 10:16
72:11,13,14,20,23	193:7,9,12,23	85:15 89:10 100:2	62:19 64:24 65:3	163:18 165:14
72:24 73:8,16,17	194:8	139:1 143:10	73:6 74:6 79:23	allow 112:20 113:3
73:18 76:10,14,16	above-entitled	148:9 166:20	81:16 82:3,9	allowing 120:5
76:23,24 78:16	195:6	192:19	83:14 86:21	allude 192:22
79:6,11 80:1,15	abruptly 144:9	add 17:2 86:1 87:16	103:17 104:9	alone 169:3,6
80:19 82:12,14	absolutely 136:6	110:13	114:11,15,24	already 14:4 27:10
83:1,4,5 84:7,9,12	156:1 177:21	added 122:6	120:17 121:19	36:10 42:3 51:23
84:18 85:1,1,3,7	Academic 3:14	addition 27:20	122:9 123:10	62:13 85:23 86:1
85:10,21 86:24	academies 55:10	89:24 97:19	124:7,14 125:4,10	88:13 90:12
87:5,21,22,22	58:17,24 61:24	101:14 191:10	126:8 127:1	101:15 116:14
88:2,4,6,8,14,18	62:11 63:9 64:4	additional 181:7,11	130:19 131:5,24	179:17
89:10,13,14,21	99:9,11,12 152:10	194:1	139:5 140:7,13,21	alternative 15:15
90:1,12,13,15,21	152:19 153:15	address 4:14 43:11	141:4 144:21	63:23 73:5,12
	162:2,21 163:4	addressed 14:4 90:2	156:13 158:1	80:2 84:5 90:25

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

2

91:6 110:15 117:16 118:6,8 119:6,9 128:13 159:1,19 160:11 191:17 alternatives 32:3,4 36:19 74:1 83:24 83:24 84:1,3 87:23,24 91:7,22 101:22 118:25 119:9 128:8,10 129:19 134:22,23 134:24 135:5,11 137:8 158:20 159:15,16 160:13 191:11,12,13,15 191:16 Alters 36:3 56:4,9 56:24 57:6,12 59:12,15,20 60:17 60:23 98:8 although 193:22 always 70:4,10,10 71:25 76:12,14 194:21 ambiguous 16:8 48:5 106:12 107:17 114:19 139:22 140:8 180:16 Amendment 175:22 175:23 American 2:4 58:11 61:10 96:1,8 151:24 America's 189:5 amicable 27:2 amongst 13:5 15:1 36:12 43:9 69:8 72:12 100:18 118:24 189:5 amount 194:1 analysis 24:17 137:19 170:13 analyst 177:1 186:5 188:14 analyze 82:19 83:2 171:5 analyzed 25:2 analyzing 82:13 172:6 ancestor 48:17 50:11 ancestry 29:16,21 30:16 193:9,12,17 ANCOVA 137:21	and/or 102:4 Angus 164:8,10,11 Ann 2:13 4:23 5:2 another 7:14 75:11 79:4 108:7 110:13 112:4 121:20 123:6 129:22 161:8 164:22 174:11 answer 5:17,22 12:3 16:10 17:10,11 46:5 47:1 50:8 57:24 73:10 82:3 82:11 87:11 98:18 98:20 99:22 109:14,16,24 115:1 124:24 125:9 138:8,10,20 138:21 141:3 156:4 158:10 159:3,10 169:1 176:11 179:10,12 187:23 answered 81:9 108:4 125:8 135:7 146:6 answers 169:2 anthropologists 112:11 191:25 anticipating 106:22 antithesis 115:10 anybody 25:6,7,7 26:4 38:21 80:14 80:17 99:17 168:4 anymore 141:20 anything 14:2 16:3 19:14 25:4,5 26:8 27:9 29:25 31:8 38:4,7,19 40:8 43:4 51:7,22 54:4 69:24 71:12,15 87:5 90:21 98:16 98:22 101:14 102:19 114:17 135:4,4 140:18,25 147:15 150:2 157:11 170:24 174:10 179:8 180:9,12,22 181:2 181:22 182:4 184:16,19 185:19 187:8 188:1,4 anyway 69:15 anywhere 135:5 AP 64:25 136:8 apart 104:10	apologize 18:5 68:9 148:25 appear 50:10,19 164:21 165:10 APPEARANCES 2:1 Appearing 2:8,15 appears 50:19,23 104:25 107:1 124:10 132:8 174:10,12 Appendix 3:14 applied 28:14 108:15 110:10 applies 9:2,4 189:2 apply 56:14 76:17 76:19,20 111:1 169:24 188:19,20 188:23 applying 32:8 110:11 141:11 appropriate 15:7,8 38:14 109:14 121:25 122:8 123:9,19,24 124:9 125:17,19 126:7 126:15 130:4,18 136:21 150:25 151:3,4,4 158:5 158:14,15 159:7 159:18 171:9 approval 54:8 approved 66:11 130:20 141:6,8 151:9 approximately 46:15 April 96:11 ARALENE 1:7 Arbor 2:13 4:23 5:2 area 1:12,12 4:12 7:17 8:4,6,9 9:14 49:2 50:5 104:3 areas 7:18,21 28:15 28:16 45:14 84:23 154:5,9 argues 52:22 argument 166:25 arguments 44:6,10 arise 85:18,20 Arizona 135:22 arm 55:25 around 7:21,24 12:18 20:18 28:14 36:21,23 37:2	69:6 87:23 124:13 142:24 149:15 153:12 175:18 179:6 182:9 arrive 12:15 arrived 9:10 122:6 article 29:4 30:1,2 31:13,14 32:7 33:6 42:9,14 51:5 52:2,3 54:18 104:21,22 148:9 156:21 articles 22:12,17 23:19 28:11,14,18 38:20 39:14,18 40:16,19,20,21,21 40:22 41:6 42:2 43:10,19,23 51:23 145:14 asked 5:14 27:4 33:17,18,20 35:14 38:24 40:6 52:7 62:13 74:7 81:9 122:23 125:19 135:7 143:8 146:5 148:12,13 172:12 190:7 192:16,19 asking 16:12 17:15 35:8 39:21 42:2 45:12 56:25 60:1 68:4 77:21 80:6 80:10,10 81:6 82:5 87:7,14 92:3 95:10 98:3 101:14 105:7 106:2,9,10 110:2 112:1 118:9 118:11 125:10 142:14 143:22 146:18,18 153:17 160:12,14 168:19 168:20,20,22,23 168:24,25 169:24 173:19 174:2 179:23 181:12 asks 169:14 aspect 111:6 171:12 171:14 aspects 48:3 143:11 assess 170:2,18 171:8,21 181:11 assessing 115:4 171:15,16 assessment 16:16 100:20 115:5 136:3,11 170:3 171:2,3,12,13	175:3 182:7 186:1 assessments 66:14 66:18,23 67:22 185:2 assignments 169:2 Assistant 185:15 association 58:11 59:9 60:22 61:2,5 61:10 62:21 96:2 96:8 102:24 103:16 151:25 164:23 165:3 associations 62:11 62:17 130:24 152:6,10,18 assume 5:22 12:24 13:9,11 15:21 16:17 19:20 37:19 81:1 86:15,16 107:4 109:16 114:14 117:6 125:12 150:20,22 150:24 159:6 160:14 179:17 186:12 assumed 30:18,19 assumes 31:20 86:15 119:16 assuming 86:3,13 86:17 87:2 118:21 138:17 139:5 158:12 159:9,17 175:9 assumption 30:20 30:21 31:19 51:20 51:21 71:14 117:18 118:7,11 118:13 assumptions 30:19 31:1,1,3,6,7 117:1 117:2 191:4 193:1 193:1,3,4,6,7,8,13 astray 176:10 astronomy 95:18 attached 195:5 attempt 111:23 attend 95:25 96:14 attendant 9:18 attended 94:9,12,15 95:6,19,22 96:6 99:14 102:12 attendee 96:4 attention 20:17,19 190:14 attested 111:9 attorney 4:25 5:1
--	--	--	--	---

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

33:21,22 147:23 attorneys 4:10 20:20 195:14 Atwood 2:5 audible 6:2 author 28:21 authoritative 42:6,8 42:8 152:20,21 authors 28:12 30:15 30:25 31:3 54:12 191:3 available 12:15 15:17 19:25 21:23 21:24 26:19,20 55:22 63:24 78:24 138:23 award 188:18,20 189:4 awards 188:17 189:10 award-winning 188:14 aware 15:15 18:11 19:9 30:25 39:4 49:8 53:9,10,14 54:19 61:11 63:8 63:22 64:13 91:19 92:12 101:11 102:16,20 103:12 103:15 104:2 135:13 136:1,16 146:11 154:4,6 160:16 163:2 167:5 178:22 179:1,4 awareness 15:4 36:12,18 72:12 80:20,24 118:24 away 120:5,19 159:23,25 a.m. 1:19 4:3	166:4 168:6 170:20 178:21 190:6 background 150:12 189:20,24 backgrounds 175:13 backwards 67:7 bacterial 150:2,5 bad 24:4 67:19 86:16 116:12 121:17 131:15 151:15 152:3 155:15 158:22 balance 69:13 BARRIE 1:7 base 24:7 based 35:17 40:4 64:11 81:18 82:13 89:17 107:4 159:17 basic 190:16 basis 50:24 104:8,16 139:13,18 beaks 144:12 bear 110:8 beat 168:7 become 85:20 becomes 113:25 before 6:9 21:22,23 26:9 34:13 52:7 59:14 72:11 107:6 113:19 116:4 119:13 122:5 125:19 151:7 156:19 157:5 172:12,24 179:11 beg 166:13 began 85:21 144:9 beginning 62:22 79:7 117:9 139:17 behalf 2:8,15 32:17 101:24 behaviors 12:8 170:6 Behr 41:16 42:5 94:2 100:12,20,22 101:5,12 161:14 161:17 Behr's 19:24 39:6 40:5,9 41:4 145:12,13 150:4 behind 13:22 14:1 16:19 97:1 128:24 128:25 177:8 178:3,7	being 19:9 26:11,12 37:4,10 48:5 64:12 75:17 76:19 78:18 88:7 91:7 105:14 115:7 120:24 121:2,5,6 121:12 134:1,2,5 142:12 144:15 146:11 152:6 189:10 193:4 belief 44:23,24 45:20,21 47:10,14 beliefs 45:24 46:24 74:11 97:22 believe 9:25 34:3 44:19,20,21,25 45:1,2,3,9,11,12 45:16,19 46:4,6,8 47:21,22 48:18,19 104:23 121:24 122:7 123:5 125:3 125:6,16,21 143:17 144:6 145:12 162:22 164:12,18 176:6 178:12 believes 159:5 167:6 believing 120:6 benchmark 151:23 155:14 besides 40:9 54:4,8 105:8 135:18 154:5 175:6 best 11:2 42:9,11 45:24 157:21 173:25 187:25 bet 142:15 Beth 1:6 5:25 194:20 better 54:11 68:13 144:23 153:13 159:23 169:8,10 177:7 between 46:1 50:11 72:18 112:10 153:3 155:22 179:9 192:2 beyond 10:16 93:14 101:11 102:7 153:24 156:8 bibliographies 92:24 big 25:9 89:24 156:7 157:17 biggest 30:2 binding 155:25	biological 78:1 79:4 79:5 95:11 126:14 139:13,18 141:16 biologist 161:15,16 161:17 biologists 161:3 biology 3:13 37:7 52:12 61:10 89:5 89:10 95:18 108:13 121:13 136:1 150:13 158:6,16 159:8 161:1,15,24 178:16,17 182:25 183:8 birds 144:12 bit 28:9 45:25 87:21 164:20 177:9 178:8,10 184:25 185:25 black 115:10 blackboard 72:2,3 78:9,17 blah 78:21,21,21 blood 195:13 blown 106:24 BME 183:10 board 1:13 9:18,21 11:24 19:5 21:11 36:16 65:14 66:11 68:11 74:15 80:7 81:21,22 87:3 91:2 130:19 145:17 165:17 Board's 11:16 74:11 80:9,21 81:7 97:22 165:15 book 20:3,4,7,14,17 21:12,15,20 23:20 31:11 78:23 79:5 79:12 84:3 85:23 86:2,7,10,12 88:21 89:16,21 99:2 125:16 127:25 138:22 139:4 141:18 143:16 144:14 145:16,19,22 190:23,25 books 39:14 40:22 42:2 128:2 145:3 145:10 boot 163:13,14 born 78:2 both 5:23 6:5 8:1 10:1 51:8,9 71:19	82:13 96:5,21 169:5 174:12 184:7 bottom 22:6 143:20 bound 131:11,24 152:25 153:4,5 Boy 156:4 Boys 124:7 branch 112:3 break 5:12,14,16,18 34:22 56:17 100:3 103:8,11 117:21 117:22 147:3 190:2 breaks 5:12 Brian 98:8 bridge 50:11 briefly 157:12 broad 47:4,6 168:22 broader 17:15 63:1 112:17 broadly 10:5 93:11 93:12 brought 20:17,19 110:8 BRYAN 1:5 bulk 7:4 bunch 99:5 buttress 180:24
C				
C 4:5,5				
cache 191:13				
California 135:21				
call 4:17 11:17 14:7 17:1 19:16 35:1,6 37:15 51:14 54:9 57:19 119:25 131:18 171:2 175:1				
CALLAHAN 1:8				
called 8:6 27:6 60:13 91:1 128:14 147:17 165:5,6 171:2 191:2				
calling 13:4 16:14				
calls 3:21,23 107:22 108:16 118:20 158:7 159:10				
came 25:2 29:23 59:19 98:17 163:20				
Campbell 164:8,8				
Carpenter 1:17 3:4 34:8 41:12 69:25 86:23 148:13				

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

4

case 1:10 4:11,23,24 5:3,8 7:2,9,13,14 7:15,19 9:10,14 13:20 16:2,7 17:21 26:9,12 27:19,19 30:15,20 36:11 41:5 42:6 63:12 65:12 76:12 82:25 98:6,25 102:4 108:23 110:4 113:24 116:25 134:13 142:8 170:4 173:17 179:16 180:19,24 181:1 194:18 cases 70:16 catch 193:21 causation 111:6 112:21 113:4,4,12 150:19,25 152:11 158:5,14 159:7,18 160:4,11 cause 144:1 147:7,8 157:21 causes 111:2,3,18 112:18 cell 150:12 161:15 161:17 center 1:20 2:11 36:22 38:23 157:2 191:10 central 47:24 89:15 166:24,25 193:7 certain 26:17,19 30:9 57:1 76:10 111:2,3 131:4 133:22 134:7 143:11 149:6 170:5 certainly 25:11 26:24 27:12 31:5 39:13 40:3,12 42:24 44:8,13,18 45:13 46:7 51:8 51:23 52:11 60:3 68:8 71:5 73:22 109:9 110:21 115:3,4 124:17 127:12 135:19 150:8 153:24 156:4 181:14 182:25 194:23 Certificate 195:3 Certified 195:24 certify 195:5,13	cetera 19:10,10 45:15,15 51:1,2 51:21 105:12 122:11,11 137:8,9 140:15,15 144:12 154:3 167:3,4 challenge 193:3 challenged 193:4 challenging 10:23 193:6,13 chance 6:11 100:8 159:21 Chancellor 185:15 change 45:12,13 48:9,14 78:3 85:17 110:14 138:16 142:13,16 157:17,23 158:23 194:22 changed 122:22 123:3 changes 145:21 194:4,17 chapter 3:13 20:10 38:1 84:24 87:2 89:5,7 121:14 chapters 23:20 characterization 10:17,20,22 11:23 characterizations 11:25 characterize 9:23 167:22 charge 174:8 charter 184:19 185:6,8,8 check 30:19 141:19 chemistry 95:18 108:13 Cheyenne 184:11 184:18 185:6 chief 172:15 Child 13:21,25 16:19 97:1 177:8 178:3,7 choice 126:15 Christian 47:3 185:21 186:11 CHRISTY 1:5 church 46:25 47:2 circumstances 159:14 citations 175:7 cite 174:23 cited 23:5 142:7 174:22 175:11	Civil 2:4 clarifying 43:2 clarity 173:11 174:9 class 13:11,12 14:23 15:7,8 37:7 66:1 73:22 76:10,17 77:2 79:7 92:23 92:25 93:10 94:23 119:19 120:1 121:13,23 122:3,8 122:17 123:24 126:7,19 129:23 131:19,20,23 136:21 139:17 140:12,20 141:14 151:1 155:16,17 155:17,21 156:14 158:6 159:8 171:15 classes 52:12,13 182:12 183:25 184:3,12,20 185:17,22 186:3 186:15,18 189:21 classie 66:3,4 68:15 69:17 140:2 170:14 classical 68:23,24 69:7 classified 47:2,7 classify 40:15 43:7 43:16,18 69:19 78:14 103:3 107:7 115:11 175:5 classroom 12:21,22 37:5 66:22 69:23 70:3,14,14,25 71:5,10,25 72:6 76:15 78:1 84:11 127:10 132:22 168:5,17 171:4 172:7 classrooms 9:5 clear 7:7 11:23 13:10 41:11,17 44:13,14,18 49:13 93:3 97:23 104:6 129:18 180:17 185:4 clearly 53:3 119:5 120:23 141:25 153:4 clips 98:24 closely 155:11 clubs 184:14 cognate 71:22	cognitively 75:16 91:21 cognizant 76:13 cold 5:10 124:20,20 125:1,3,7,14,16 125:20,21 colleagues 38:25 collection 149:6 college 52:12,13 160:25 161:23 188:15 colleges 9:8 colloquially 10:23 Colorado 135:21 183:8,25 185:14 185:16,21 186:13 186:13,18 come 11:18,20 15:11 17:4,21,24 21:19 26:17 27:4 27:18 29:6 36:5 46:4 63:19 83:4 91:5 109:1,3 120:5 136:19 163:16 165:19 168:6 169:25 188:24 comes 55:12 comfort 4:16 comfortable 4:15 5:10 26:15,16 coming 28:5 45:20 136:20 166:4 180:5 commended 31:20 commit 23:1,25 33:3,11 94:7 committed 27:5 33:9 53:5 110:24 common 29:16,21 30:16 95:17 193:9 193:12,16 commonly 106:7 113:3 communications 25:19 communities 53:24 community 15:2,3 30:13 31:19 43:22 49:7 57:20 59:4 74:2 100:11,14 101:21,23 102:3,9 102:9 153:22,23 154:2 162:15,16 162:17,19,23 163:7 165:13,19	165:21,24 190:11 191:1 192:6,22 193:2,11 complained 10:14 Complaint 9:23 10:12 98:18,20 99:23 complete 66:17 70:8 170:13 191:7,8 195:10 completely 70:17 complex 149:21,23 complexity 149:4,11 component 149:7,7 149:16 components 69:1 computer 85:12 163:14 concept 15:7 90:7 90:10,15 91:17 92:1 117:16 119:17 127:14,15 127:16,17,24 128:3,13,17,18,19 128:21,22,24 129:2,3,4,5,9,13 132:22 136:24 171:17 175:15 concepts 76:10 86:22 128:25 concerned 112:5,6 concert 154:19 conclude 105:1 concluded 194:25 conclusion 15:20,25 29:23 83:4 107:23 108:17 109:4,18 110:3 118:18 158:8 conclusions 25:2 108:19 conference 95:6 102:14 163:21,23 164:25 conferences 26:6 94:9,12,15 95:20 95:23 96:7 97:9 99:15 102:12 163:17,25 193:23 configuration 149:6 confirming 31:18 conflicting 74:6 confusing 68:9 81:17 confusion 128:16 Congress 177:10,24
--	--	---	---	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

5

Congressional 176:4 177:13 conjured 36:16 connected 195:13 connote 143:2 connotes 139:8 consensus 124:10 consider 18:23 44:4 44:10 83:21,23 152:18,19,22 considered 11:4 158:25 considers 7:24 consistent 13:12,25 36:9,14,17,19,21 36:25 37:8 46:13 124:17 125:25 127:2 132:10,23 144:19 constantly 105:23 constitutionally 151:4 construct 67:24 68:5,10 146:22 constructing 11:4 68:3 constructivist 69:9 consult 38:21 55:17 55:19 56:10,11 57:1 58:23,25 consulted 23:22,23 24:13 58:1 99:9 99:11 152:16,17 consulting 23:11 contained 75:23 195:7 contains 7:2 contemporaneous 59:17 contemporary 13:23,24 28:13 30:12 69:14 70:6 103:7 110:24 content 97:4 120:12 123:14 127:2 contents 89:18,19 178:9 context 158:8 172:8 174:5 contextual 122:1,2,9 122:11 123:11 continue 167:10 continues 21:3 85:17 continuing 11:25 159:20	control 70:17 160:14 controversial 191:6 192:11 controversies 13:23 controversy 40:16 41:3 43:6 51:13 57:19 59:4 61:18 100:10 102:17 103:2,13,19 110:4 113:25 161:21,24 162:3,5,12,23 163:6,18,22 164:7 164:13 165:1,14 165:14,24 175:18 179:6 190:10,18 191:1,9,10 192:5 192:21,23 193:11 193:13,23 195:16 conversant 9:1 23:9 conversations 33:22 conveyed 72:20 77:14 conviction 159:23 coordinated 66:6 copy 34:19 correct 7:1,3,12 8:8 8:18,22 14:12,19 16:1,25 17:18 18:17 19:4 20:8 22:1,7 24:14 25:17,21 26:22,24 28:9 30:23 32:11 33:11,15 37:24 39:7 43:2,18,21 48:12 49:10 53:17 54:7,22,25 56:13 56:16 58:3,5,10 60:5,25 62:15 63:5,11 69:2,10 69:10 88:5,11 89:23 90:7 96:25 97:6 99:19 101:3 101:8 104:12,20 105:2,11 111:5 114:18 115:5 117:3,4,19,20,23 118:8 119:11 131:4 132:12,17 133:15 134:3 135:25 136:7 138:2,4 144:18 145:8 147:11 148:18 149:3 150:17 158:3 160:2 162:14,20	165:12 171:24 176:8 177:11,15 177:16,17,18,19 177:20,21 178:6 182:2,17 183:9 184:8 186:14,20 188:23 189:1,11 190:11 193:18,24 194:3 corrected 28:2 correcting 8:19 171:25 correction 176:19 Correctional 151:25 correctly 56:5 57:8 143:24 correlates 67:23 Council 55:16 58:4 counsel 17:5,5 25:14 33:19 65:11 99:24 109:24 164:3 193:25 count 94:2 98:18 country 28:17 36:21 36:23 55:10 County 195:2,19,25 couple 28:11 38:20 100:15,15 125:18 course 17:4 20:1 21:9 36:15 53:4 59:16 71:18 78:11 107:1,5 158:16 167:3 183:5 186:17 190:17,21 190:23 courses 9:6 182:6,9 182:12,20,23 186:24 court 1:1 27:7 194:18 195:3 courts 108:22 covered 86:4 190:6 covers 21:20 craft 33:17,20 crafted 59:6 create 12:8 created 46:8 creating 13:1 149:16 creationism 38:7,9 74:10 97:21 credibility 54:3,4,9 credible 44:8,9,10 44:11 critical 12:10,12,19 16:16 33:6 36:24	70:1,4 80:20,25 81:14 82:21 83:9 83:18,19,19 84:7 84:9,12,15,18,22 84:24 85:1 86:24 88:6,8,14,17,18 88:25 89:14,21 122:12 168:6,8,11 168:12,17 169:23 170:4 171:23 critically 12:20 13:15,19 14:5 31:7 37:18 72:14 83:4 90:1 92:4,6,7 92:9 133:3 134:6 134:9 135:2 137:6 169:14,18 171:5 171:20 criticism 173:20 174:14,20 criticizes 42:22 43:4 criticizing 43:19,23 critiquing 172:6 cry 167:25 CSR-4467 1:22 195:23 Culture 157:3 current 186:12 currently 30:9,10 49:6 curricula 132:1 curricular 155:19 155:22 172:8 curriculum 8:15 15:8 66:10,12,24 66:25 67:2,4,21 67:25 68:3,6 130:20 131:8 140:14,16 141:6,9 151:8,9,16,24 152:3,23 156:2 165:7 182:6,9,12 184:22,23 185:1 185:19 187:3 189:23 CV 1:10 189:8 CYNTHIA 1:6 D D 1:7 3:1 4:5,5 dance 154:11 Darwinian 142:2,4 142:8,10,17,21,23 143:5 Darwinism 143:3,5 Darwin's 18:12	78:18,23 91:1,6 164:15,16 data 21:2 24:6 83:3 83:17 85:17 105:20 106:5,6 157:21 date 1:18 29:17 dated 9:25 195:20 day 5:9 7:4 34:5 71:18 76:4 120:18 191:20 192:20 dead 168:7 deadline 59:21 deal 9:4 76:12 166:5 debate 3:20 43:7 51:1,13 85:19 94:18 100:14 101:21 102:13 103:2 163:22 debates 36:22 debating 165:15 DEBORAH 1:5 decide 17:16 20:16 109:19 123:20 130:7 131:2,9,19 131:20,22 136:20 153:13 181:10 189:21 decides 68:11 126:12 130:22 131:3 decision 109:1 127:10 decision-making 8:1 25:1 dedicated 154:18 defend 171:5 defendants 1:14 2:15 5:7 defense 20:20 25:14 33:19 65:11 define 10:4 11:18 14:22 23:23 41:8 44:20 45:24 48:7 48:9 94:24 95:15 96:18 102:3 106:1 106:3,5 110:6 111:25 128:21 144:22 151:17,20 defined 73:7 95:20 96:15 97:5 108:12 108:22 112:22 128:4,18 144:15 148:22 151:21 defining 42:8 45:21 49:10 51:14 64:6
---	--	--	---	---

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

6

70:8 151:18 definitely 90:13,15 124:6 definition 18:7 66:3 66:4 68:4,15,23 68:24 69:7,17 94:22 95:16 105:22 107:15,18 107:20,21 108:1,2 108:3,5,7,8,14 108:15,24 109:1,7 110:9,11,13 111:1 112:3,4,20 113:10,14,23,24 114:4,16 127:13 140:2 157:18,24 158:24 definitions 9:16 12:12 50:25 83:22 110:15 114:7 degree 182:13 183:13,15,16,18 183:19 deliberate 66:5,8,20 139:8 delineation 72:17 Dembski 100:12,20 101:12 Dembski's 53:13 demonstrated 32:3 denomination 47:9 denote 43:25 denotes 128:22 depend 123:12 Depending 136:12 depends 7:15 123:13 130:13 136:6 depiction 138:5 DEPONENT 1:17 deposed 4:24 deposition 4:20,22 17:17 46:9 47:18 69:22 100:4,6 181:10 194:14,25 depositions 27:13 27:14,14,22,25 28:1 34:18 35:21 98:5 99:20 180:3 180:4,6,7 descent 45:16 describe 106:5 192:13 described 20:24 192:8,10 describes 21:1	describing 14:24 68:24 description 177:7 descriptions 144:23 design 3:19 10:24 11:17,24 15:16 18:14 32:4,5,7,8 32:10,16,22 38:5 38:11,14 39:5,10 39:15,18,25 40:2 40:9,14,23 41:3,7 41:9,15,18 42:7 42:10,16,20,23 43:5,12,20,24 44:19,21,23 45:1 52:1,17 53:7,15 54:20,24 56:3,8 56:15,23 57:4,10 57:20,23 58:15,19 59:2 60:22 61:12 61:25 62:4,12,18 63:10,13,14,17,23 64:2,8,10,17 69:16 73:5,13,18 73:19,21 74:10,14 75:2,9 78:22 79:1 80:1 84:8,13,19 87:25 88:15 90:1 90:4,7,16,21 91:1 91:5,8 92:2,3,5 93:18 94:1,4,4,10 97:7,21 98:1 99:7 99:14,15 102:6,11 103:20,22 117:2,5 117:6,16,18 118:5 118:8,9,12,15,17 119:8 127:6,11,16 127:17 128:11,14 132:14 133:14,17 133:19,25 134:5 134:11,17,19 135:14,24 136:2 136:17,24 137:5 138:6,15,25 141:12 143:7,11 143:13,13,25 144:3,5,7,9,13,20 144:23 145:4,10 145:25 146:10,16 147:1,7,12,24 148:23 149:9,12 149:18,20,24 150:1,5,19,24 157:23,25 158:4 158:13,16,20,24 159:6,15,25 160:3	160:17,23 161:1,4 161:8 172:16 173:16 174:13,18 174:21 175:15 178:11,24 179:2 185:11 186:24 187:2,17 designate 129:4 designed 54:17 designer 146:12,17 146:23 157:19 designing 67:9 detail 21:13 32:13 149:13 182:8 detailed 130:14 details 167:22 Detroit 1:21 4:1 developed 10:2 developing 14:9 20:5 21:2,6 37:14 37:17 64:14 73:25 75:6,8 85:7 155:2 development 48:16 191:18 devoted 163:23 Dick 1:17 3:4 4:17 4:18 11:3 17:13 25:20 26:23 34:7 41:12 64:7 156:24 differ 143:3 difference 155:1 differences 111:22 155:5,6 different 7:13 12:11 12:17 14:25 15:1 15:5,9 23:7 36:22 42:1 43:8,9 45:14 48:3,16 68:5 73:8 75:18 77:6,7,9 78:10,12,12 79:13 85:22 87:16 88:19 95:2 117:8 118:19 122:21 123:1 125:18 128:18 136:13 141:11 142:2,10,19 150:15 163:8 172:4 179:10,20 differs 78:23 difficult 29:24 30:3 30:4,22 31:2,6,23 dinosaurs 111:17,18 121:11,14,14,18 121:24 122:4,5,7 122:18 123:6 direct 70:11 84:1	190:13 direction 78:7,14 directions 71:25 72:2 78:15 directly 67:23 110:18 111:12,15 111:16,17 195:15 Director 157:2 DIRECTORS 1:13 directs 84:2 disagree 166:23 174:15 discipline 93:13 96:22 108:9,10 154:18 disciplines 9:3 154:16,23 155:4 155:14 Disclosure 3:12 discount 71:22 discovered 78:19 83:13 105:15,21 Discovery 3:21 157:11 172:13 173:14,15 174:4 discuss 14:16 137:11,14,14,15 141:20 155:18 161:21,24 169:17 187:17,19 discussed 16:14 17:25 26:21 27:20 41:14 74:1 94:10 94:13 96:14,17 99:16 101:15 163:18 discusses 42:15 160:23 161:1 discussing 13:22 28:13 30:9,10,14 30:15 42:7 59:3 165:14 discussion 30:12 35:12 37:2 43:7 47:18 51:13 64:16 69:6,11 70:6 80:11 97:4,7 100:18 102:13 103:2 122:4 149:15 153:20,21 154:1 156:13 162:14 163:22 168:12 171:1 173:23 182:18 191:4 discussions 36:22	80:7 88:4 91:11 dispute 48:1 111:6 disputed 108:25 distinction 81:21 153:3 distinctive 144:10 distinguish 54:6 distinguishes 142:21 distinguishing 153:2 district 1:1,2,12,12 4:12 9:20 10:6,24 72:19 80:14 97:13 99:18 101:25 125:23 126:8 130:7,25 131:3,6 131:9,11,25 133:3 141:4 153:6,14 154:2 155:23 districts 8:1,3 130:24 141:25 152:4 153:1,10,11 153:11,25 154:21 district's 9:15 82:8 104:3 131:8 141:24 151:8,15 district-adopted 130:15 district-approved 140:14 Doctors 36:3 100:12 document 3:18,19 3:21 9:11 11:9 156:19 164:24,25 170:14 174:8 documents 86:19 87:9 103:1 doing 4:16 6:11 9:20 10:6,19,20 24:6 64:9 66:19 69:16 79:13 107:13 128:6 146:18 179:13 181:6 dollar 14:22 domain 171:21 done 10:25 26:10,11 27:10 28:4 32:9 67:21 69:13 142:8 146:11 169:3,6,8 169:10 170:9,10 170:14,21 171:8,9 179:8,12 180:13 181:8 189:18 190:3 194:24
---	---	--	--	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

7

doubt 52:18	Economic 185:16	elsewhere 42:18	essence 17:13	15:15 16:20 18:13
Dover 1:12,12 3:22	economics 94:21	elucidate 116:1	essential 113:21	20:3,5,18 21:2,6
4:11 6:24 9:14	95:13	emanating 103:15	essentially 20:24	28:12,19 30:9,11
10:24 11:16 16:22	educate 154:12	embrace 162:3,4	21:1 82:7 103:5	30:14,17,18 36:13
16:23 50:7 64:10	education 7:9 8:4,7	emeritus 147:22	establish 80:25	37:4,9,14 41:7
65:16,18,20,22	8:10,12,14,14,17	employed 171:9	established 116:14	44:25 45:9,10,11
66:19 69:16 72:19	8:17,21,22,23 9:7	employees 131:5	136:23	47:21,22,23,25
78:11 79:13 85:22	9:8 12:23 14:7	encourage 12:20,24	et 19:10,10 45:15,15	48:1,4,7,9 49:3,4
86:1 87:16,23	28:7 33:12 36:14	13:2 69:7 72:13	51:1,2,21 100:22	50:7,25 52:1,7
97:12 104:3 118:4	36:20,25 37:15,22	73:15 79:10 84:17	105:12 108:13	55:1 56:14 57:16
129:17 132:9	38:16,25 55:15,22	88:14 92:4,11	122:11,11 137:8,9	59:3,11,14 60:7
133:5 136:13	58:23 59:5 61:23	122:12 171:20	140:15,15 144:12	60:12,13 61:14,21
145:16 171:12	62:3,16,23 63:8	175:17	154:3 167:3,4	63:22 64:14,22
173:9,20 174:10	64:3 95:22,24	encouraged 72:23	evaluate 13:15,19	72:13 73:5,13,21
Dover's 174:9	96:1,2,20,22,23	82:23 129:13,18	50:22 133:3 135:2	73:22 75:8 82:25
dovetails 83:7	97:9 99:10,12	encouragement	evaluating 14:5	84:20 85:1,7
down 6:1,5 68:14	109:6,14 131:13	79:8,9	134:6 137:6,7	87:20 88:7 94:12
72:4 194:22	152:7 163:4,9,11	encourages 13:5	185:4	99:7,15 101:22
dozens 23:7	163:17 165:6	72:16 84:18,22	evaluation 155:17	105:2,6,8 114:1
Dr 19:24 57:12	167:3,16,21,22	89:25 92:6 167:17	156:10 186:1	117:17 118:6
60:17 86:23	175:2,3,8,8 182:3	178:23 179:2,5	EVELAND 1:6	128:10,14 132:20
100:22 148:13	182:4,5,14,15,18	encouraging 13:18	even 22:24 35:4	133:6 134:14,24
161:15	182:21,22 183:11	16:17 37:18 83:14	76:18 80:1,3	135:6,11 142:2,3
draw 72:17	183:12 184:3,7	83:23 86:23 88:16	90:18,18 125:20	142:4,4,5,6,9,10
drawing 190:14	186:1,3,5,8,15,18	88:18 89:14	127:9 139:20	142:11,12,17,21
drinks 5:11	187:2,11,15 188:2	end 23:11 67:5,5	153:11 158:6	142:22,23 143:1,5
Drive 2:12	188:9 189:18	120:18	events 103:7 110:19	159:2,19,24
due 59:18	educational 7:22,24	endorse 57:9 102:19	165:10	160:11 161:21,25
duly 4:6 195:7	8:24 15:18 64:1	English 154:10	eventually 170:5	162:3,5,24 163:6
duplicative 86:18	96:8,24 136:11	engrained 193:2	ever 4:20 39:12,13	163:19 164:7,22
87:1,2	175:1 189:22,24	enhances 15:19	39:13 47:16 52:7	165:24 167:11,22
during 52:15,16	189:25 191:25	enlarged 107:10	58:12 59:8 60:19	167:23 175:18
72:6 120:1	educationally	enough 26:16 34:18	65:22 71:9 76:18	178:13 179:6
	175:21	41:23 77:2	93:22,23,24 94:9	187:20 190:18
E	educators 175:9,11	ensure 185:1	94:12,15 95:19,22	191:6 192:12
E 3:1,9 4:5,5,8	effect 177:21	entail 113:12	157:5,7 186:15	193:7,14,15
each 152:5 153:14	effectively 42:12	entered 105:21	188:6,9 189:12,15	evolutionary 29:1
154:24	effectiveness 155:20	176:4	189:18 191:7	50:9 65:9 85:17
earlier 40:6 41:12	effort 66:6,9,20	entire 20:10 21:15	every 9:13 62:2,3,6	161:3 190:15,19
51:5,19 53:20	78:25 138:24	entitled 3:18,19,21	62:7 76:4 109:6	Evolutionists
78:16 88:2 106:4	Einstein 110:23	148:10 190:19	113:9 130:25	143:24 144:6
107:7 108:12	111:3	entry 177:12	131:9,11 154:10	evolve 21:3
119:25 120:3	either 5:21 39:3	environment 3:16	171:21 178:10	Evolves 3:20
133:21 137:12	55:19 56:14 66:21	192:4	everyone's 114:16	exact 87:13
140:2,13 145:11	74:18 99:6 127:21	Epidemiology	everything 9:20	exactly 81:6 92:21
162:9 164:20	141:15 154:18	133:11	10:5,25 17:20	Examination 3:5
166:1 178:8	178:22	Episcopalian 47:8	120:1 165:23	examine 31:22
179:21 180:2	electronic 33:1	epistemologies 15:6	evidence 45:13 62:5	110:18 111:11,15
early 143:9	element 113:21	epistemology 14:22	78:19,21 83:2,13	111:16,17 160:12
earth 46:17 47:11	116:23,24 120:12	equal 70:5 77:4	83:16 105:15	examined 4:6
47:14 121:24	120:14 149:9	116:7 120:9	110:19 111:10,11	examining 28:11,18
122:5,7,18 123:7	elementary 115:14	equals 116:8,11,18	111:12,15 118:21	111:9
123:25 124:4,7,13	elements 168:8,9,10	119:20 120:7,9	138:18 139:6	example 7:16 9:8
146:25	168:11	equivocate 48:19	159:10 160:13	12:8 13:7 30:8
easier 187:22	Elizabeth 1:22	equivocating 16:11	evolution 3:22 13:9	36:15 40:18,19
Ecology 3:16	195:23	errors 139:3	13:13,17,20 14:6	48:17 51:20 71:23

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

8

76:9 96:2 100:22 110:25 111:10 115:12 120:4 137:17 142:25 144:7 149:19 169:22 193:10 examples 13:16 110:22 except 38:23 99:10 excerpt 3:17 19:25 Exchange 168:14 excuse 86:6 exhibit 6:14,15,17 22:5 106:17,19 107:20 132:2,4 143:18 148:6,8 156:16,18 172:21 172:23 181:17,19 exist 78:20 123:20 166:19 existence 39:16 46:7 52:20 127:12 134:7 146:15 178:4 existing 13:15 14:5 133:4 134:25 exists 110:4 expand 102:7,8 expect 27:6 29:13 75:24 76:3 77:16 79:16,18,19,20 expectation 76:1,7 90:24 91:4,18 92:16,19 expecting 27:3 76:18 experience 184:10 189:22 experiences 24:23 187:8 experiment 170:16 170:23 expert 3:12 6:21,22 7:8,14 8:20 11:9 14:11 19:24 27:15 27:17,21,24 35:20 35:21,22,23 39:6 39:19 40:5 41:4 41:13,14,17 42:4 42:24 43:1 48:24 51:8 52:2 53:10 53:11,16 54:21 93:25 94:3 98:8,8 101:17,24 103:25 104:9 109:4 148:22 149:2	161:10 163:3 180:20 expertise 7:7,18 8:6 8:9,11 32:18,19 40:3 49:2 50:5,21 98:9 154:24 experts 35:25 36:2 51:10 93:17 99:13 104:3,11 142:7 148:19 164:9 166:2 180:7 explain 14:21 42:12 69:21 77:11 80:3 111:24 112:2,17 141:19 143:7 157:21 158:18 174:16 explained 33:5 explaining 112:14 explains 41:2 42:9 42:11 explanation 78:22 91:6 111:23 112:25 113:1 138:15 144:1 150:4 explanations 83:22 111:9 191:17 explicit 93:15 explicitly 93:10 136:25 137:1 172:8 explore 12:14 17:20 72:16 78:25 129:13 138:24 exposed 127:20 exposing 64:2,6,6 64:20 117:15 expressly 141:7 extended 173:23 extension 56:1 extent 17:14 194:4 extinct 85:20 extra 92:15 93:4 extremely 115:14 F face 73:15 81:24 82:16 144:14,21 facilitated 169:3 fact 14:9,9 16:24 17:16 34:21 35:7 36:13 47:22,23 48:25,25 49:6 57:5 62:5 64:14 64:15 76:13 78:20	79:5 85:6 87:6,6 90:19 98:5,11 99:20 104:25 117:5 121:4,15,21 124:5,14,16 132:9 134:22 137:22 143:6 145:4,23 149:22 150:20 158:4 159:4 166:23 175:12 178:14 190:10 191:11 factors 110:19 facts 27:18 118:21 138:18 139:5 159:9 180:25 fails 116:19 fair 5:23 10:17 16:15 41:23 42:5 71:13 73:14 95:16 109:15 117:12 175:3 faith 46:13,19,20,25 familiar 39:24 61:9 130:17 147:17,19 148:13,18 150:4,6 160:21,25 162:21 172:12 178:3,4,9 181:20 familiarity 40:3,4 177:10 Family 42:17 176:25 186:5,10 far 79:23 130:14,16 167:25 fascial 81:19 fashion 73:24 fast 131:17 faster 194:15,16 favor 52:22 faxed 34:13,13,19 feathers 144:12 feature 30:18 166:24,25 features 30:17 144:11 federal 177:4,6,19 178:22 179:1,4 feedback 54:16,17 feel 5:13 26:8 179:15,24 180:23 FENIMORE 1:5 few 23:3 55:14 99:7 100:9 field 39:1 98:9 102:5 131:13	144:15 146:24 175:8 figure 23:15 filed 9:24 filter 25:2 final 28:25 finally 13:21 37:1,3 find 28:10 29:4,19 30:5 51:9 64:18 93:1 128:12 129:21 130:15 156:14,15 172:10 fine 11:14 12:1 17:18 74:12 109:20 141:1 finish 37:25 181:6 finished 6:7 107:13 fins 144:11 firm 38:18 52:3 100:21 first 4:6,20,22 12:6 12:22 14:18 18:1 29:5,8,9 31:17 36:10 38:2,3 47:1 62:25 92:6 106:25 122:24 143:21,23 144:2 174:22 183:13,15,16,18 183:19 195:6 firsthand 60:24 61:13 102:15 158:1 162:25 167:9 fish 144:11 fits 142:15,19 five 35:11 115:21,23 115:24 116:2,7,8 116:13,15,17,18 119:20 120:7,9,19 five-minute 190:2 fix 166:11 flagellum 150:2,5 flat 123:25 124:4,8 flight 193:21 floor 1:20 Florida 135:21 focus 37:7 42:17 73:22 89:15 176:24 186:5,10 186:11 focused 10:12 focussed 41:15 folks 100:18 175:7 175:11 187:6 following 10:1 follows 4:7	follow-up 171:7,18 183:7 190:7 force 177:21 forget 174:8 forgotten 162:9 form 69:18,19 170:2 formed 16:2 forms 144:1,9 formulation 148:3 forth 20:6 21:21 25:1 32:20 36:15 37:11 41:8,9 51:16 64:13 70:4 79:12 80:7 82:16 82:18 83:17,25 84:20 88:3 89:18 93:4,14,21 118:16 129:20 132:1 155:20,23 164:22 165:20 171:6 181:1 189:23 191:14 192:4 forward 83:12 194:7 found 30:22 31:8 149:22 foundation 55:15 57:22 62:2 77:20 167:5 foundations 58:17 four 73:1 74:4 115:20 116:11,17 120:9 fourth 14:10 190:14 190:14 four-paragraph 19:3 66:1 72:6,20 74:17 77:12 78:10 79:25 82:20 frame 25:1 framework 181:9 Frank 2:12 FREDERICK 1:7 free 5:4,13 freedom 5:5 from 3:17 13:25 15:21,22 20:1 21:25 22:3 35:17 37:25 38:1 42:19 48:16 50:14 54:6 61:1 65:3 67:5,7 69:7 70:7,9,11,22 71:3,6,13,17 78:23 82:23 83:11 85:16 86:10,12 89:19,22 90:12
---	--	--	--	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

9

91:12 95:2 98:25 103:16 104:10 120:5 130:7 142:3 142:10,12,21 143:20 148:22 149:10,11 150:23 156:2,5,21,21 164:22 166:9 167:25 170:25 174:10 184:9 front 32:23 64:11 66:1 77:25 119:19 full 157:14 function 149:8 Fundamental 29:1 further 9:20 36:7 72:16,24 195:13 forthurance 10:25 fusion 124:20,21 125:1,3,7,14,16 125:20,21	81:17 139:17 Gillen 34:4 girls 124:7 give 54:15 71:23 76:9 86:5 108:7 110:13,22 115:12 124:2 129:22 137:17 143:25 148:14 160:19 169:22 170:20 176:17 given 5:16 63:12 97:13 126:20 146:24 195:10 gives 54:3 giving 140:22,23 glass 106:21 global 8:1 globally 8:14 go 9:12 11:10,20 12:3 16:10 17:15 22:10,22 26:6,9 26:25 27:3 31:24 33:8,12,16 34:25 38:9 46:24 47:1 56:5 66:8 68:14 72:2,3 78:9,17 79:12 82:11 84:16 92:8 93:4 99:8 106:15 115:1 117:9 118:23 125:22 128:12 138:20 140:13 157:13 158:10 159:12 164:1 169:17 171:22 172:10 173:10 176:10 178:21 187:13 190:6 193:20 goal 72:25 73:4,11 73:14 74:3,13,13 74:24 75:1,2,4,14 75:25 76:1,6 80:5 80:9,15,17,21 81:7,14 157:17 goals 12:8,9 15:18 64:1 81:20,25 82:2,8 gobs 24:2 God 46:6,7,8,15 146:4 goes 9:14 24:17 54:15 155:2 going 5:9,12,22 6:6 7:4,4 10:16 11:16	11:17 13:10,12 15:11 18:4 25:15 25:19 27:2,3,4 33:25 41:25 55:19 63:19 72:14,23 73:23 76:11,14,17 79:21,24 87:18 88:1 91:17,22 92:8 93:3 103:6,8 108:25 109:3,19 109:25 112:14 116:4 119:14,20 119:24 124:1 126:8,13 127:3 128:11 130:1,5 139:9,21 141:20 146:9 154:1 162:14 181:2,7 187:24 193:22,25 194:21 gone 26:12 57:11 59:24 96:9 98:24 good 4:13 5:25 6:4 24:4 44:6,6 48:3 49:4 63:14,17 67:13,16 93:8 100:3 109:5 115:4 116:2,8,19,23 117:11 118:7,18 119:10 120:13,16 120:25 121:6,11 121:17,25 123:25 124:3,13,23 125:5 126:15,17,24 131:8,14 132:9,18 132:21 137:10 139:4 141:23 151:15 152:3,22 152:23 155:15 156:3,11 158:21 158:25 160:4,5,7 160:15 169:16 171:13,19 173:5 175:2,3 190:9 Gotcha 63:7 gotten 17:12 97:24 grade 70:15 grades 137:24 graduate 52:15 76:12 137:25 grand 15:13 105:3 gravity 49:17,22 105:10 great 144:5 greater 102:10 142:25 154:1	ground 124:1 group 54:2 149:6 169:8,10,11 guess 7:7 8:16 14:3 14:4 16:11 19:16 21:7 31:12 44:22 45:20,21,24 53:13 59:6 93:15 96:21 111:21 121:8 123:18 124:1 143:6 guessing 27:11 53:13 guide 115:5 152:22 152:24,24 guiding 172:3 H h 3:9 4:5 habituate 170:5 habitation 170:8 hand 19:17 139:15 140:9 195:18 Hanson 4:23 happen 76:8 happened 65:2,4 happening 52:23 hard 17:11 131:17 harkens 133:20 Hartwig 42:15 hate 133:13 having 4:6 26:10 40:4 61:1 90:23 91:18 122:3 173:23 head 6:1 53:1 161:19 164:1 health 129:23 130:9 130:10,17 139:17 140:16 hear 5:19 12:21 58:12 72:15 79:20 83:2 90:18 91:22 92:8 97:4,7 151:12 172:9 heard 5:23 6:4 59:8 77:17 88:11,12 102:13 157:5,6 172:7 179:22 hearing 79:21 151:12,13 hearings 165:19 hearsay 174:3 held 35:12 47:18 hello 94:2 help 37:13,19 67:10	130:3 142:14 helpful 29:8 180:2,6 helping 14:8 16:20 37:16 166:18 helps 189:20 Hendy 28:22,24 29:10 37:3 38:17 52:3 her 74:11 97:22 148:24 hereunto 195:18 hesitate 138:21 173:22 hesitated 159:3 hesitating 93:25 high 160:16,21,22 161:20 184:11 higher 185:25 highlighted 53:10 hjm 11:10 17:9 35:3 35:8 68:4 77:21 87:7 109:7,10 110:2 140:22,23 148:14 157:1,7,9 173:24 174:2 176:10,11,17 181:8,9,13 historical 90:19 history 98:16 99:21 hold 14:17 45:22,23 84:16 homicide 183:16 homosexuality 78:1 79:3,5 126:5,12 126:13 139:13,18 141:16 honestly 70:1 hope 76:3 77:13 90:24 91:4,18 92:15,19 hopefully 70:23 horse 168:7 host 172:5 hot 5:11 hours 179:22 huge 77:24 human 167:23 humor 135:9 hundreds 23:7 hypotheses 29:1 113:15 hypothesis 12:16 29:16 32:8,20 113:17,20 hypothetical 123:2 129:22 140:22
---	---	---	---	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

10

hypotheticals 124:2 H-e-n-d-y 28:25	implies 29:20 111:10 important 23:14 39:14 40:13,15 53:21,22,23,24 62:3 77:1 85:19 110:2 impossible 30:3 impression 156:9 improved 166:15 inaccuracy 115:21 116:22 119:15 120:4,7 inaccurate 115:11 115:18,19 116:1 116:18 119:12,15 120:10,15 121:4,5 138:14 176:15,23 incentives 12:7 incentivized 82:16 include 10:5,8 12:13 12:17 69:1 92:23 113:14,19 120:17 131:25 168:12 182:6 included 10:1 18:16 22:4 42:24 56:4 56:24 101:1 120:11 121:12 175:9 includes 10:25 19:2 19:11 62:7 101:5 133:4 159:6 164:12 including 18:13 32:4 101:16,22 121:19 122:10 incoherent 173:11 incomplete 14:8 37:15,17 73:25 167:23 191:2,7 inconsistency 81:25 independent 15:17 50:21 63:25 101:4 104:10,18 131:7 149:1 independently 144:16 indicate 143:12 147:15 indicates 170:21 indicating 120:23 indirectly 195:15 individual 153:14 inevitably 9:4 24:8 24:16 41:8 43:8	55:6 126:4 165:18 179:13 inferring 82:2,7 infers 82:8 inform 104:13 156:11 informal 171:2,3 information 12:15 24:5 26:19,20 64:19 72:20 73:1 93:1 164:4 172:10 193:22 informed 155:7 informs 153:19 initial 59:16 113:22 190:8,13 initially 110:23 inquire 25:19 inquiry 15:17 63:25 inside 100:10 insidious 171:23 inasmuch 59:5 60:23 97:20 101:1 150:10 165:20 instance 9:6 22:18 59:24 112:8 115:7 117:1 119:18 125:6 139:3 149:19 instead 122:25 123:5 Institute 157:11 172:13 173:14 174:4 Institute's 173:15 instruct 66:6 99:24 109:25 instructed 83:1 instruction 66:15,16 67:10 71:19 72:9 78:14 79:15 88:10 97:12 139:8 190:17 instructional 66:13 67:21 72:7 120:2 instructionally 71:21,24 72:8 instructions 72:1 78:15 88:2 97:25 intact 144:11 integrate 12:14 intelligent 3:19 10:24 11:17,24 15:16 18:13 32:4 32:5,7,8,10,16,22 38:5,10,14 39:5	39:10,15,18,25 40:2,8,14,22 41:3 41:7,9,15,18 42:7 42:10,16,20,23 43:5,12,20,24 44:19,21,22 45:1 52:1,17 53:7,15 54:20,24 56:3,8 56:15,23 57:4,10 57:20,23 58:15,18 59:2 60:22 61:12 61:25 62:4,12,18 63:10,13,14,17,23 64:2,8,9,17 69:16 73:5,13,18,19,21 74:10,14 75:2,9 78:21 79:1 80:1 84:7,12,18 87:25 88:14 90:1,4,7,15 90:21 91:1,5,8 92:2,3,5 93:18 94:1,3,4,9 97:7,21 98:1 99:6,14,15 102:6,11 103:20 103:22 117:2,5,6 117:16,18 118:5,7 118:9,12,15,17 119:8 127:6,11,16 127:17 128:11,14 132:13 133:14,17 133:19,25 134:4 134:11,16,17,19 135:14,24 136:2 136:17,24 137:5 138:6,15,25 141:12 143:7,11 143:13,25 144:3,4 144:7,8,10,13,20 144:23 145:3,10 145:24,24 146:10 146:15,25 147:7 147:12,24 148:23 149:9,12,17,20,23 149:25 150:5,18 150:24 157:19,23 157:24 158:4,13 158:16,20,24 159:2,6,15,25 160:3,17,23 161:1 161:4,8 172:15 173:16 174:13,18 174:20 175:15 178:11,23 179:2 185:11 186:24 187:2,17 intended 21:4	interactions 112:10 192:1,2,3 interested 27:12 92:25 112:7 173:23 195:15 interesting 31:10 interrupt 18:4 interrupted 46:9 47:18 intricacies 144:6 intrinsically 29:24 30:4,22 31:23 intro 183:5,7 introduce 80:24 90:6 119:17 122:17 136:24 137:13,21 148:23 158:6,15 159:8 introduced 37:2 120:24 127:17,23 127:24,25,25 128:3,13 129:9 171:17 introduces 118:5 134:10 introducing 14:13 15:3 38:13 76:21 90:10 123:14 129:8 132:22 135:5,10 159:15 175:14 introduction 38:1 introductions 188:12 investigate 179:25 invited 188:1 inviting 165:18 involve 191:15 involved 98:13 148:1,3 155:9,10 168:12 184:14,22 184:23 186:6,8 involves 79:2 114:1 139:1 in-depth 40:24 in-service 189:16 ironclad 14:9 irreducible 149:4 149:11 irreducibly 149:20 149:23 irrelevant 139:14 139:22 140:8,24 isolation 70:8 issue 9:23 13:22 19:17 20:18 28:14
--	--	---	---	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

11

29:21 30:16 31:20 33:6 40:17 41:7 42:16 47:24 49:7 51:1,24 88:25 109:17 114:1 116:21 126:14 166:18 191:4 192:24 issues 5:5 7:24 8:14 13:23,24 87:23 139:15 140:8 142:24 155:22 186:6,8	136:23 138:7 139:17,25 140:19 146:5 151:11 154:1 156:9 157:12 160:19 163:11,15 165:15 166:9 169:6,16 173:19 191:20 192:8,10 justification 134:4,6 justify 12:16	76:11,16 80:5,8 80:21 81:7,10,11 81:14,20,23 82:19 84:21 85:2 86:5,9 87:7,9,11 89:9 90:11,13,14,15,18 90:20 91:10 93:3 97:12,16,24 98:3 103:4 104:21,24 106:12 107:3 108:18 109:5 110:6 112:19 113:5,6,9,13 114:15,16 115:4 115:16 116:21 117:13 118:13 119:18,25 122:22 123:16 124:24 125:2,8,25 126:9 126:18,21 127:1,6 127:21 129:11,12 130:6,10 133:5,8 133:9,10,12 135:15 136:13,18 138:5,11,12,21 142:11,14 143:6 144:16,25 145:1 145:16,19,20,21 145:23 146:2,5,7 146:13,20,21,22 146:25 147:9,10 147:14,21 148:1,2 148:3,5,21 149:4 149:11,14 150:2 150:18,20 151:3 151:18,21 152:9 152:12,13,14,15 156:6,7,23 157:1 157:11 158:1,2,3 159:3,4 161:13,17 163:13,25 164:4 166:14 169:2 170:9,9 171:4 172:16,18 174:4 174:17,19 175:4 175:12,12,23 176:14,23 178:10 178:11,13,14,16 178:20 179:12 181:13 183:6 187:1,4 193:25 194:1,7,11 knowing 14:14,24 15:5,10 16:21 80:25 150:15 181:4	knowledge 51:25 101:4 104:10,18 149:1 known 8:4 10:23 23:2,3 73:5,13 90:12 knows 81:17 L LaBarge 1:22 195:23 label 129:1,3 171:17 lack 54:11 lacks 173:10 174:9 Lamarckism 119:4 language 135:12 laptop 33:1 102:21 large 162:18 larger 153:20,21,22 last 6:11 14:3,10 15:23 26:23 34:5 46:10 96:12 106:24 107:9 143:21 later 11:18 85:14 latter 115:22 laudable 81:19,24 law 2:11 38:18,23 49:23 52:2 64:15 100:21 177:8,13 177:16,21 lawsuit 10:15,18,20 10:22 lawyer 130:2 181:6 lawyers 38:23 187:5 lay 31:25 lead 105:1 leaders 8:24 leadership 7:22,24 7:25 8:2 9:3 24:25 189:23,25 learn 12:21 20:23 42:19 70:22 71:3 71:6,8,11,13,16 72:23 73:15 74:4 74:19,21 76:19 79:10,16 87:19 91:19 125:17 135:14,24 learned 140:5 150:7 learners 76:13 83:21 learning 12:25 13:1 13:3 15:19 24:25 37:10,19,20 68:17 68:19,20 69:8,19	69:20,24 70:5,5 70:10,10 72:18,19 72:22 74:23 75:11 75:18 77:5,7,7,8 77:10,17 81:2 82:24 83:20 149:21 160:15 172:3 least 71:1 91:19 92:16 100:15 102:22 leave 16:4,5 156:9 160:4,5,7,9 Left 13:21,25 16:19 97:1 177:8 178:3 178:7 legal 107:22 108:16 108:19,21 110:2 130:2 153:3,7,9 156:2,5,8 158:7 legalistic 156:9 legally 153:5 155:25 158:15 175:25 legislation 177:4,6 178:9 legitimate 15:18 49:17 63:25 length 137:14,19 144:5 lesson 87:17 119:21 lessons 64:22 65:9 67:8,8 72:15 86:5 91:23 155:22 185:3,3,5 let 17:5,5 18:4 26:23 42:1,22 45:8 46:24 62:9 94:1 118:3 124:2 129:22 143:23 164:4 181:13 190:13 193:25,25 letting 172:2 let's 9:16 11:20 19:1 22:10 29:6 33:12 35:2,10 43:11 52:18 64:7 86:15 121:10 126:11,11 129:22 139:2 144:8 154:14 159:6 182:3,8,25 187:8,22 190:2 level 115:15 128:23 138:1 154:24 155:8,8,10 170:7 Levine 20:7,25,25 84:21,25 85:3
--	---	--	--	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

12

87:1,17,21 88:13 88:16 89:1,9 90:4 90:9 Liberties 2:4 library 64:19 79:6 79:12 92:9 128:1 129:21 141:18 LIEB 1:6 life 18:14 40:10 45:23 53:4 55:2,5 78:22 85:21 144:1 144:9 174:11 life-style 126:6,14 like 9:9,12 11:2 12:5 17:2,20 22:22 23:18,20,20 27:1 38:18 41:25 69:22 69:23 73:10 76:9 78:25 85:16 96:1 97:1 107:2,5,9 123:17 136:7 137:20 138:24 154:19 168:18 176:13,17 183:16 183:17 192:5,10 likelihood 149:17 likely 77:19,23 likewise 31:21 169:15 limit 106:8 limitations 97:16,18 limited 18:13 73:19 126:20 133:21 141:10 limits 114:22,22 115:2 Linda 159:5 line 61:7 links 165:9 list 54:5 55:14 119:9 133:4 151:17 listed 19:17 23:13 23:20,21 24:11,18 24:20 57:6 152:17 168:18 listing 186:17 lists 87:25 literally 83:12 literature 18:25 19:15,16 22:3,8 23:6 24:1,6,12 28:9 30:6 39:3,4,9 51:3,17 52:19,22 53:6,14,18 54:19 54:23 55:1,18 56:11 99:6 163:20	litigation 6:25 151:24 little 28:9 164:20 177:9 178:8 182:8 184:25 185:25 live 69:11 lives 127:18 living 143:12 Lloyd 2:12 local 155:3 locality 153:19 located 153:23 LOCATION 1:20 long 30:1 163:13 192:20 look 18:1,8,23 19:5 20:2,9,16 22:2 25:4 27:1 33:16 34:19 38:9 56:6 58:14 59:1,13,24 60:9 61:15 81:23 102:21 103:7,25 106:8 112:4 125:23 126:2 144:8 155:13 156:2,5 157:13 164:2 178:21 181:20 187:8,22 194:7 looked 11:20 17:22 17:22 18:15 19:1 19:14,15,18,23,25 20:11,14 23:15,24 26:20 28:6,13 33:13 38:16,19 52:4 57:11 81:18 98:16,19,19,22,24 99:5,6,21 103:19 165:23 looking 18:17 24:3 29:21 42:4 82:12 82:15 89:18 107:1 111:2,3,18 112:13 112:17 118:14 142:14 151:22 155:21 looks 107:4 112:1 154:16 lost 70:17 lot 18:4 25:10 69:10 94:18 99:6 156:4 160:18,20 177:2,4 177:5 182:24 184:25 lots 45:14 louder 5:21	Love 188:13 lunch 100:4 117:23 M M 1:17 3:4 4:5,8 macroevolution 48:11,15 49:11 50:10,14,18 51:4 51:15,18 52:20,23 164:21 166:6,20 166:23 167:6,8,14 167:19,20,24,25 made 18:11 19:9 49:8,13 77:1 91:1 91:3 117:1,17 118:11 123:18 127:10 140:5 174:5,6 188:6,9 194:18 magazine 40:21 148:9 magnifying 106:21 mainstream 165:23 major 62:2 183:12 make 5:10 11:12,22 24:3 35:6 41:16 44:12,14,15 69:4 69:15 70:12 74:18 78:8 90:23 91:12 91:14 92:13 93:2 95:7 115:13 123:15 131:4 136:19 140:4 153:17 176:18 194:15,16,17 makes 13:10 35:10 55:24 78:7 92:12 making 15:15,16 63:22,24 64:13 93:6 141:16 153:2 185:2,3 man 121:10,14,18 121:24 122:5,8,18 management 7:25 8:2 MANCOVA 137:21 mandate 174:12,18 MANOVA 137:21 many 128:2 153:10 153:11 179:22 183:3 March 156:22 mark 6:13 42:15 marked 6:15,17 106:17,19 132:2,4 143:18 148:6,8	156:16,18 172:21 172:23 181:17,19 marriage 195:14 Master's 183:19 184:1 material 92:15 109:17 materialistic 193:5 math 154:10 mathematicians 161:7 mathematics 119:20 matter 25:6 81:3 126:5 141:24 155:9 190:16 195:6,16 may 1:18 4:2 24:7,8 53:19 76:10,23 83:24 85:15 90:11 93:1 103:17 104:2 113:12 125:7,22 127:18 130:23 134:8 136:8,12 137:14 141:22 152:7 170:7 172:7 172:11 176:15 180:25 191:7 195:20 maybe 11:2 34:19 34:20 76:18 85:14 106:6 141:17 151:11 153:11 159:25 Mayor 156:24 McLean 108:23 mean 8:5,11,13 9:11 15:12 16:16 18:21 21:17 23:8,15 25:5,7,9 28:16 30:1,10 31:9 32:6 35:19 37:6,9 40:24 41:6 42:11 43:13,14 44:11,15 44:17,24 45:4,21 46:25 47:4,8 48:19 50:6 51:16 53:3 54:4 55:19 60:10 67:3 68:3 70:13 71:12 72:22 72:25 74:23 75:1 75:22 76:8 77:15 78:11 80:1 85:5 85:23 90:11 93:19 94:1 98:19 102:18 105:4 110:1 111:1 111:3,16 112:24	112:24 116:14 117:14 119:1,11 120:24 121:8 122:9,11 123:10 125:12 127:15,16 127:24 128:17 129:1,8,12 130:12 131:2 136:3 138:22 139:17 142:6,13,19 147:15 151:21,22 153:8,23 154:11 154:22,25 155:6 155:16 160:12,18 162:4 166:22 167:20 168:7 169:12,16 170:11 171:20 174:17,19 179:18 182:11 183:18 190:21 191:7,24 192:16 194:23 meaning 37:7 40:1 44:5 46:3 61:4 78:9 84:24 94:16 94:19 means 5:18 58:6 107:18 144:9 195:9 meant 27:24 68:2 192:14,19 measure 54:3 155:20 160:14 mechanisms 167:11 medically 129:24 139:19 member 174:4 members 15:1 59:6 65:14 81:22 165:18 177:24 memory 23:1,25 33:3,9,11 53:5 110:25 mention 38:10 90:3 119:1,4,8 133:14 165:13 mentioned 38:20 39:6 41:13 51:5 51:19,23 53:19 54:20 59:7 62:7 67:15 69:1 89:2 99:7 101:12 136:22 141:12 146:9 162:10 mentions 14:13 119:1,6 132:13
---	---	---	--	---

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

13

178:11,13,16 merely 35:16 message 77:14 93:8 met 157:7 metaphorical 129:10 methodology 171:10 methods 189:12,15 Meyer 156:23,24,25 157:14 158:12,23 159:4,5 Michael 40:4,9 41:4 41:16 94:2 Michigan 1:21 2:13 4:1 135:21 195:1 195:19,19,25 micro 48:10 microevolution 48:13,18,20 50:15 MIDDLE 1:2 might 7:15 12:9,18 19:16 29:8,22 31:24 32:2 35:6 38:8 71:3,6,20 82:2 110:25 112:7 115:10,11,16,25 116:4,6 119:13 131:18 141:18 153:15 155:4 169:13 177:7 178:19 million 95:1,2,4 Miller 20:7,24 35:24 84:21,25 85:2 87:1,17,20 88:13,16 89:1,9 90:4,9 millions 122:5 mind 41:11 55:12 78:6 81:22 82:23 83:1,10,15 129:19 170:1 minds 82:4 Mine 6:23 minimum 131:11 ministry 186:11 Minnich 100:12,20 101:12 161:15,17 minor 183:21 190:6 minute 107:9 127:9 132:21 163:15,16 minutes 35:11 misadvising 26:24 mischaracterize 34:6	Misguided 3:22 mislead 68:8 misleading 48:4,5 120:25 121:6,9 122:17 138:15 misrepresenting 148:24 missed 41:21 43:3 193:20 missing 10:9 65:24 mistake 194:19 mistaken 10:3 model 120:8 121:20 121:20 150:19 156:12 modeled 169:11,12 169:13,23 modeling 170:17 models 169:13 modification 45:16 45:17 modify 194:5 molecular 161:15 moment 86:15 117:6 150:24 162:10 173:1 month 76:15 Moore 2:11 38:23 more 8:14,23 13:2 17:4 28:9 34:25 43:10 64:19 69:8 69:13,19 78:14 79:8,14 81:1 87:21 93:1 107:7 107:17 111:8 125:17 128:12,22 129:20 130:14,16 135:9 142:23 147:18 148:15 149:2 155:7,7 156:3 169:9,25 172:10 173:23 177:23 179:13 180:5 182:8 most 4:15 5:9 39:14 40:13,15 41:14 42:6 48:8 55:9 70:16 110:21 153:11,24 155:21 motivate 82:17 motivated 72:8,10 72:11 82:17,18 motivation 78:6 81:21 Mountain 184:11 184:18 185:6	movie 98:14 much 27:3 33:5 72:1 73:16 84:17 116:21 117:13 118:13 122:1 125:2,8 153:10 173:23 Muir 20:22 21:25 25:16,23 34:3 multiple 14:13,24 15:5 16:21 68:16 80:25 83:3,21 105:5 152:4 multitude 172:5 music 183:11,12 must 77:6 81:4 113:18 114:6,22 123:18 myself 154:12 N N3:1 4:5,8,8 NABT 61:9,17 NAEP 136:9,10 name 4:10,25 22:24 23:22 28:20 36:4 42:15 55:13 58:13 84:6 110:23 114:9 134:17 147:19 157:5,6 161:18 175:16 named 189:5 narrow 94:1 national 14:7 28:7 33:12 36:14,20,25 37:15,22 38:16 55:11,14,15,16,17 55:20,22,23,25 56:2,6,11,22 57:3 57:11,14,18,22,24 58:4 59:5,9 60:21 61:2,10 102:16,24 103:16 136:5,8,9 136:11,14,16 152:7,9,18 153:15 154:4,9,17 155:3 155:8,13 156:11 164:23 165:2 167:2,20,21 natural 45:19 95:14 108:11,12,15 110:10,11,19 111:2,3,6,18,24 112:2,5,12,13,14 114:12,14 142:24 143:25 147:8	150:19,20,22 155:14 161:9,11 191:17,19,21 192:14,16 naturalistic 193:5 nature 5:3 8:25 72:13 85:7 94:25 96:7 necessarily 22:9 23:8,10 24:2 43:25 44:17 46:20 46:21 47:12,13 52:24 57:9 71:22 71:25 73:19 75:1 75:2,12,22 76:5 76:18 77:3,4,15 80:22 82:17 89:16 93:4,7 106:16 114:8 127:24 129:8,12 130:25 137:23 143:1 155:16 167:24 necessity 190:1 need 5:11,12,16 6:2 18:7 26:8 30:19 30:25 83:16 88:6 88:8 106:21 110:14,15 114:10 125:25 126:9,17 126:23 127:1,4 129:24 130:6 134:9 147:3 157:23 162:11 164:18 166:5 171:12 179:15 181:10 needs 13:8 31:6 133:22 179:8 never 26:10 63:16 102:12 157:1,8,9 170:6 186:21 new 9:15 21:2,5 48:16 78:19 83:13 85:17,18,20 90:6 90:10 105:14,20 149:22 newer 145:19 news 40:20,21 98:24 145:14 165:6,11 newspaper 28:14 38:20 156:21 next 5:18 28:24 72:15 76:15,15 91:23 122:25 144:8 nice 69:14	ninth 157:14 nobody 171:24 172:1 nods 6:1 none 135:15,23 non-material 112:25 non-natural 113:4 non-naturalistic 112:25 non-peer-reviewed 54:6 188:2 normative 151:22 notable 155:4 notably 188:12 Notary 195:3,25 note 54:5 110:2 186:17 188:12 noted 107:24 nothing 108:18 135:10 notion 14:6 122:17 123:1 160:10 167:7 November 9:25 10:8 10:13 18:15 19:2 nowhere 133:13 NSTA 59:8,13,24 number 3:11 6:15 16:15 37:18 64:13 64:15,18 72:12,13 72:15,15 76:22 87:18 93:12,12 106:17 127:23 130:2 132:2 143:18 148:6 156:16 172:21 173:10 181:17 O O4:8 Oakland 195:2,19 oath 27:7 176:18 object 11:23 35:2 48:5 49:19 79:23 106:11 140:5 143:24 149:21 151:2 160:6 174:1 180:15 objecting 17:8 objection 9:22 11:8 11:25 16:8 33:21 41:10 48:2 49:13 62:5 63:16 68:1 73:6 74:6 77:20 81:16 82:3,9 86:3
--	--	--	--	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

14

90:17 107:16,22 107:24 108:16 114:19,24 118:20 122:23 128:16 135:7 138:7,17 139:5,7,14,22 140:7 143:8 158:7 159:9 objectionable 140:20 141:21 objections 113:22 objective 67:23 122:10 objectives 67:5,12 123:13 185:4 observe 71:1,2 observed 106:5,6 obviously 11:19 18:24 22:7 25:14 30:1,12 74:24 119:3,7 120:20 129:6 174:15 Occasionally 182:19 occur 167:6,14 168:3,4 occurred 51:18 167:7,19 occurrence 48:1 occurs 48:20 October 9:18,21 10:7 19:5,12 off 35:12 47:18 53:1 161:19 164:1 office 35:1 official 61:11 often 12:24 31:19 46:4 92:13 96:6 126:22 155:9,18 155:18 156:13 171:3 oh 14:3,19 23:1 39:21 85:12,15 98:4,13 132:18 146:21 182:11 Ohio 40:17 135:21 okay 4:17,20 5:15 7:21 12:4,6 18:1,6 19:11,23 24:9,22 29:8,15,20,25 34:3 41:21 45:12 60:8 62:20,21 68:22 77:11 80:13 101:20 103:9,10 107:14 108:10 109:22 114:13,15 114:17 117:24	122:14 124:22 125:4 126:24 129:14,16 139:11 141:1 151:6 157:16 159:7 162:11 164:5 165:4 173:2,3 181:15 188:1 194:6,24 old 46:17 47:10,14 139:21 146:25 oldest 184:10 omission 67:18 once 96:9 121:10,14 one 4:10 6:11 12:6,9 12:13,17 13:16 14:10 19:16 20:20 21:24 26:19 28:22 28:24,25 29:5,7,8 29:9,12,23 30:16 31:6,24 34:2,8 39:19 48:8 51:5 51:19 53:11 55:11 62:20 64:13,16 69:11 70:7,8 72:12 76:22 83:2 84:4 86:20 87:13 87:18 90:2 91:7 93:12 94:24 95:15 96:7,9,20,21,22 96:23 102:22 103:18 105:2 110:23,25 111:12 111:13 112:3,19 115:7,9,10,11 117:1 119:1,7 121:20 122:1,9 124:8 125:21 126:2 127:21,23 128:10 129:10,24 129:25 131:20 133:6,25 134:1,2 135:9 148:19 149:2 152:6 154:10 155:20 157:17 158:20 159:16 160:13,19 162:13 164:8,22 169:13 170:1 171:1,8 172:15 174:9 175:20 177:23 183:22 184:25 187:13,13 190:24 193:16,18 ones 23:11 62:7 104:1 135:20,23	152:17 155:25 one's 12:16 one-sentence 10:6 one-way 13:1 only 20:14 21:24 23:4 33:1 41:2 53:13 56:9 59:12 83:8 88:11,12,21 89:11 101:1 103:18 107:10 119:1,6,7 127:9 131:1 145:11 150:3 152:25 157:12 165:22 open 24:9 45:25 46:1,2 82:23 83:1 83:9 129:19 157:20 operate 149:8 opine 80:23 opined 63:16,21 109:13 132:9 opining 63:12 109:17 opinion 9:13 14:16 15:13 16:15,23 17:9 26:17 48:25 50:2 51:10 58:2 63:15 64:4 98:10 98:11 110:8 116:25 117:8 118:4 131:18 138:16 141:24 173:4 179:16 180:14,18,19,20 180:24 194:4 opinions 7:2 9:9 11:4,13,20,21 16:2,6 17:1,13,21 17:24 24:13 26:15 27:7,19 36:7 49:15 52:5 55:21 59:14 131:16 opportunity 176:17 opposed 41:3 94:20 142:4 149:17 161:6 175:8 183:19 opposes 62:4 order 11:7 114:5,10 160:18 179:25 organism 149:5 organisms 191:17 organization 61:3 62:3,4 63:9 167:13,16 186:10	188:7,10 organizations 58:24 59:7 61:23 62:10 62:17 153:16 154:17,19 155:11 162:22 163:5 orientation 126:14 origin 45:23 78:22 originated 172:11 origins 18:14 79:4 141:17 174:11 other 5:25 11:8 16:2 16:5 17:1 18:12 22:12,16,19 25:5 27:12,14,19 28:15 28:16,17 29:5,7,8 29:12 32:2,2,4 35:25 36:17,21 38:24 39:9 41:6 42:4 53:14,15 54:20 56:10 59:15 63:4 64:16 70:7,9 74:1 77:9 80:2 83:3 87:13 89:1 89:22 92:24 96:7 97:9 99:22 100:12 101:5,11,17,25 104:2,3,11 105:4 105:5,7 110:14 111:12,13 112:19 118:25 128:7 130:23,23,24,24 136:14 137:20 145:3,15 149:1 154:4,9,19 155:13 160:13 162:21 163:3 166:2 168:23 172:5 175:6 179:15 180:3 191:11,12 others 22:7 23:22 27:13 31:21 36:1 42:12 55:13 69:3 100:22,23 102:1 118:14 141:22 142:1 150:10,11 152:8 155:11 161:18 189:11 193:3 ought 49:8 51:21 93:11,11 141:9 out 12:9 23:15 29:2 31:25 53:3 56:11 59:21 65:24 93:4 102:19 120:6 125:13,15 128:12	129:21 137:10 141:19 148:9 152:20 154:14 157:19 162:13,15 162:16 167:17 169:17 171:22 172:2,10,10 188:13 outdated 139:3 outside 12:22 15:2 82:14 93:13,13 100:10 114:13 130:21 151:14 155:14 over 7:4 22:10,22 37:20 45:12,14 48:9 72:15 75:22 91:22 93:25 99:8 103:19 124:1 125:10 142:13,16 160:14 161:21,24 162:3,5,23 163:6 163:18 164:7 165:24 Overton 113:23 Overton's 108:24 own 12:25 24:19 41:11 72:16 79:11 93:13 123:22 128:12 169:15,24 170:7,12,18 172:6 172:11 ownership 13:3 37:20 69:8 75:22 75:25 76:3,5 owning 83:20
--	--	--	---	---

P

P 4:5,5

Padian 36:3

page 3:3,11 10:21

14:11,18 15:23

20:4,9,11,12,13

20:14,16,23 21:8

21:25 22:6,16

24:11,21 85:6,8

85:10 86:4 88:21

89:22 106:24,25

107:10 132:25

133:1 143:21

157:13 162:10

165:2,5 190:13,24

pages 89:1 178:10

paleontology 95:19

Pandas 3:17 78:24

99:1 138:3,14,23

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

15

139:2 143:16,20 144:24 145:5,22 paper 164:12 170:22 194:22 paragraph 15:23 134:18 143:21 157:14,14 190:14 paragraphs 73:1 74:5 paraphrasing 31:3 pardon 166:13 parents 65:18 88:4 129:25 130:1 parochial 185:9 parsimonious 126:23 part 13:18,21 18:10 18:18,20 22:7 45:10 47:25 66:19 76:25 83:19 110:3 120:11 134:10,18 140:14 141:8 149:25 165:19 172:19 187:2 participate 136:9,12 particular 7:9,19 13:18 17:9 20:18 32:13,20 79:25 84:4 107:17 122:1 152:23 153:14 174:3 particularly 50:10 193:6 parties 195:14 parts 28:17 149:7,7 149:16 pass 81:21 91:3,16 passage 99:21 passed 9:17 10:7 19:5 21:11 81:23 90:23 91:2 153:5 153:6 passes 70:21 passing 80:9 passive 13:1 past 69:5,6 Pat 34:4 pedagogical 15:18 63:25 81:25 91:12 130:21 153:3,7 pedagogically 63:14 91:15 130:4 151:4 151:5 152:23 156:3 158:14,15 160:9 pedagogy 7:10 8:15	92:2,4 15:9 16:24 24:25 63:17 67:16 67:19 109:5 115:4 116:3,8,19,21,23 117:11 118:7,19 119:10 120:13,16 121:1,7,11,17,25 123:16,25 124:3 124:13,23 125:5 126:15,17,24 131:8 132:10,19 132:21 137:10 139:4,8 141:23 151:15 153:12 155:15 158:25 169:16 171:13,19 173:5 182:6,9,13 189:23 peer 43:16,17,18 53:21 54:1,9 164:13 peers 54:2 peer-reviewed 43:13 44:1 53:6 53:14,18 54:6,19 54:23 55:1 103:23 104:22,25 164:6 188:1 pencil 72:5 78:9,17 Pennsylvania 1:2 2:4,6 13:7,13 16:18 19:18 132:8 132:10 134:5,20 136:23 175:4,6 Pennsylvania's 135:18 Penny 28:22,24,24 29:10 31:11 32:18 37:3 38:17 52:3 100:21 penultimate 15:20 15:25 16:14,22 people 3:17 25:10 44:25 45:1,1 51:15 53:3 78:2 78:24 94:18 98:9 98:11 99:1 100:19 110:20,22 112:10 121:23 122:7,24 122:25 123:5,7 124:15 138:3,14 138:23 139:2 140:17 143:20 145:5 163:10 167:2 189:25 190:1 191:11	192:2,24 performed 139:19 perhaps 107:11 114:15 155:4 159:23 period 92:7 120:2 perjury 94:7 perpetuated 12:10 person 155:10 personal 46:23 47:10 48:22 personally 44:19,20 44:25 150:8 person's 113:9 perspective 156:5 perspectives 43:8,9 Petress 22:18,20 168:9 Petress's 22:18 ph 156:24 phenomena 111:2,4 Philip 147:19,21 148:10 philosophers 161:7 physics 95:18 108:13 Ph.D 1:17 3:4 183:20 184:5 pick 78:9,16 127:18 pieces 24:12 Pittsburgh 2:6 place 47:21,22 49:12,12,12 77:18 77:19,23 98:17 144:2 166:21 placed 97:17 placement 136:7 places 126:2 182:20 plaintiff 5:6,8 plaintiffs 1:9 2:8 4:11 9:24 43:1 51:10 Plaintiff's 6:13 plan 87:17 plane 34:14 platechtonics 105:11 players 98:12 plays 76:25 Please 56:18 62:10 115:15 132:13 plus 9:18 115:16,20 115:21,24 116:2,6 116:8,11,13,17,18 119:19 120:7,8,9 120:19	point 5:11 10:11 14:11 17:4 26:13 37:12,13 41:22 45:6,25 48:3 51:3 58:17 61:23 76:19 76:21 77:4 82:24 83:6,12 100:13 101:23 113:25 165:22 167:12,16 174:9,11 180:11 187:9,14,17,19 189:20 190:7 pointed 86:23 pointing 120:6 points 33:17 35:16 123:15 policy 3:22 7:9 9:4 9:15,17,19,19 10:2,3,14,15,24 11:17,24,24 12:6 12:7,8,10,20 13:3 13:9,24 14:3 16:23,23 18:1,8 18:10,18,21,23 19:1,13 21:10 36:11 37:12,13 63:18 72:25 73:12 74:3,7,9 75:14 80:5,9,11,15,17 80:19,23 81:4,5 81:18,19,20,24 82:12,13,15,15 84:2 86:13,20 91:2,3,16 96:20 96:22,23,24 98:17 99:21 117:11,13 117:14 118:4,18 118:24 127:19 129:17 132:9 138:22 164:16 171:13 173:5,9,11 173:20 174:9 175:20 177:1 186:5 188:14 political 94:20 95:12,13 162:16 Poole 28:22,25 37:3 38:17 52:3 100:21 portion 20:3 portions 21:17 pose 169:1 position 12:16 56:3 56:23 57:6,7,8,12 57:15,19,23 58:14 59:10,13 60:15,21 61:12,17 153:13	167:14 171:5 176:24 positions 59:1 64:5 positive 59:22 possibility 157:19 possible 73:16 possibly 113:9 114:16 119:8 posting 103:6 postings 103:1 potentialities 159:21 potentially 70:24 71:4,13,20 75:19 78:4 90:11 122:13 122:15 123:10 137:16 159:13,14 159:20 169:19,21 171:1 181:4 Practically 154:10 practice 7:9 141:25 160:15 practicing 125:22 161:11 precipitated 80:11 precisely 85:19 192:22 predicated 158:4,13 160:3,10 prefer 4:14 premeditated 80:13 premise 190:16 preparation 19:20 19:21,23 23:24 55:2,3 93:21 166:9 179:18 prepare 22:11 24:15 27:10 35:14,17 66:17 194:2 prepared 9:13 11:9 16:6 23:4,9 24:3 preparing 52:5,6 54:14 55:18,21 59:14 prerogative 194:12 194:24 Presbyterian 47:8 presence 195:8 present 27:6 74:11 96:17,19 97:21 115:25 116:4,6 119:13 134:13 presentation 170:15 170:23 188:6,9 presentations 163:21,21 187:22
---	---	--	---	---

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

16

187:23 presented 118:14,15 122:20 124:19 144:24 presenter 96:4 presenting 124:14 presidency 7:16 presidential 96:23 96:24 press 9:24 10:8,13 18:2,10,15,17,18 18:20,24 19:2,11 55:24 173:13,22 174:3 prestigious 55:9 61:3,4 presumably 27:5 61:6 67:12 68:12 71:7 72:22,25 78:6 79:11 84:14 91:10,20,24 92:8 105:16,18,19 Presuming 65:5 pretty 17:11 25:9 27:3 33:5 36:9 45:4 75:4 85:24 97:23 106:11 124:10 129:18 160:7 167:9 168:22 180:15,17 pre-service 189:13 principal 9:1 24:23 64:24 74:18 125:22 188:14 189:10 principals 190:1 principles 104:13 143:13 print 26:16 153:9 printed 66:10 prior 28:5 55:20 64:22 65:9 prison 151:24 152:1 privy 80:6,11,13 probabilities 149:15 probably 18:4 30:2 42:6 53:4 55:11 70:14 124:5,6 129:25 147:4 152:24 169:9 180:10 183:6 194:15 problem 12:14 120:20 121:3 139:12 problematic 121:22	problems 15:14 16:21 18:12 35:8 43:11 49:4 50:7 50:18 51:4 57:16 59:3 61:20 63:21 81:4 166:5,12 173:10 190:15 procedure 181:14 procedures 137:20 139:20 process 54:15 77:8 79:21 114:5 131:22 137:21 154:16,22 155:2 172:3 produce 70:10 154:20,21,21 produced 28:4 33:13 producing 24:13 product 33:21 170:21 professional 48:21 48:23,24 50:2 155:11 184:9 professionally 49:11 professor 39:6 147:22 150:4 161:14,14 185:21 188:15 professors 186:23 187:1 program 155:17 156:10 183:2 184:1,5 186:1 188:13 programmatic 156:12 programs 96:14,17 136:13,14 182:13 Progress 136:11 prohibit 174:10,12 promote 16:16,21 81:14 82:21 83:18 84:7,12,15,16 85:1 88:6,8 92:3 122:12 147:7 168:16 promotes 15:18 63:25 80:20 83:8 84:9 91:24,25 pronounces 21:1 36:4 property 67:24 proponents 172:15 proposes 143:11	proposing 191:12 proposition 100:13 provide 93:7,15 164:3,3 provides 54:17 prudent 179:24 psychology 95:13 public 23:4 185:8 188:14 195:3,25 publication 30:5 42:17 60:6,9,10 60:12 61:14,15 102:16,18 103:5 publications 44:1 54:5 55:20 60:4 103:12,15 164:6 187:13 published 66:10 103:22 153:9 162:25 164:12 pull 85:11 162:10 pun 21:4 pure 82:4 purpose 123:14 128:6 purposes 10:19 pursuant 10:6 13:17 18:3 19:16 31:10 pursue 15:17 63:24 put 26:16 29:2 52:18 56:11 77:9 94:24 102:19 152:20 194:22 puts 154:14 P-e-n-n-y 28:24 P-o-o-l-e 28:25 p.m. 100:4,6 194:25	123:8 125:9,10 136:20 138:9 141:3 143:9 148:11,12 160:7 167:12 173:6 180:16 190:8 questionable 121:16 questioning 6:11 questions 6:9 10:21 20:6 34:20 35:8 41:25 51:17 85:19 87:8,12 100:9 109:11 114:14 136:2 139:23 168:18,19,20,20 168:23,25 169:1 179:23 190:7 quibble 49:25 quite 168:2 quote 93:17 100:14 100:15 135:11 179:5 quoted 162:17 quoting 85:16 174:3 R R 4:5,5 Raelism 45:2 119:2 raise 72:12 80:24 191:5 raised 48:3 raises 51:4 80:20 raising 31:20 36:12 36:18 118:24 rather 12:25 36:13 78:15 143:13 187:13 reach 170:7 reaction 93:2 173:19 read 10:9 11:11 12:21 18:2,19,22 19:3,24 20:9 21:7 21:12,14 22:8,10 23:6,24 24:2,24 27:17,21 28:6,7,8 31:11 33:8 35:17 35:19 37:22 38:2 38:3 39:6,9,20,21 39:22 40:4,6,8,13 40:16,22 41:2,13 41:17 42:2,3,7,22 43:4,8,9,10,16,19 43:23 46:10 51:3 51:17 52:11 53:2 53:4,6,18 54:1,23	55:1,7 56:9 57:12 59:12,15 60:15,17 60:17,19 64:12,21 65:6,8 72:6 74:4 74:17,19,22 75:17 77:12,16 79:3,6 82:13 87:4 88:21 89:1,3,4,5 90:20 92:8,9,10,11 93:11,11,12 98:5 99:1,20 100:25 101:2,7 105:20 107:6,11,20,21 125:16 130:18 133:9 135:25 138:3,8 143:22,23 143:24 145:3,5,8 145:10 147:15 149:2 150:10,23 159:22 163:3 166:9 172:7,9 173:1 180:3,25 181:2,3 190:24 readers 20:5 reading 15:21,22 27:12 41:6 42:14 43:6 50:14,25 51:1 59:15 72:24 81:19 82:20 89:24 92:15 93:4 149:10 159:22 172:6 179:14 194:13 readings 92:24 reads 64:23 66:1 85:22 133:5 ready 144:11 real 105:24 realistically 76:8 reality 14:25 94:25 really 5:25,25 23:14 32:6 65:24 69:24 71:8 78:3 90:20 133:16 140:18 157:23 174:4 176:21 180:13 realm 114:11 reason 92:23 108:8 133:16 reasonable 79:16,18 79:19 reasons 169:25 rebut 173:20,22 174:2 rebuttal 33:17,20 33:23 34:8 35:3,5 35:7,9,14,15,18
---	---	--	--	---

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

17

100:8 174:23 rebuttals 33:24 34:4 34:7 recall 42:14 162:11 recapture 118:3 received 77:15 recess 56:20 118:1 147:5 190:4 recessed 100:4 recognize 6:18 8:4,5 8:16 90:25 103:13 106:20 132:5 162:5,6 163:5 164:7 193:23 recognizes 165:24 recognizing 69:11 recommendation 32:1,2 recommended 31:21,24 reconcile 63:15 64:4 173:4,7 record 11:22 35:12 41:16 46:12 47:19 176:4,9 177:13 reduced 195:8 redundancy 86:16 redundant 22:21 86:13 130:5 refer 129:4 193:12 reference 20:18 22:9,20 23:10,13 23:19 78:23 84:5 92:25 100:15,23 100:24,25 102:1,2 137:5 138:22 163:22 191:3 referenced 23:4 39:19,22 53:15 84:2 99:22 103:1 103:19 104:2 132:23 150:11 152:17 162:9 165:25 192:24 193:18 referenced-to 101:2 references 22:3,5,13 22:14,16,19 24:11 24:21 25:5 84:4 92:13 100:23 165:21 referencing 103:17 163:10 referent 129:12 referring 18:9 19:7 191:9	refers 188:13 reflection 177:23 refutation 149:25 refute 149:23 refutes 167:7,9 regardless 70:14,15 registers 90:19 regulation 177:19 179:1,4 REHM 1:5 reject 10:22 relate 24:7 187:14 related 19:19 21:10 22:12,17 23:17 24:5,9,10 40:19 71:19,21,24 76:23 96:22 98:16 137:20 182:12 187:8 relates 8:15 182:4 187:9 188:2,4 relation 28:6 40:7 55:14 148:20 relationship 13:1 173:16 relativity 49:25 50:1 50:3 105:10 release 9:25 10:8,13 18:3,10,15,17,19 18:21,24 19:2,11 173:13,22 174:3 released 21:3 relevancy 106:13 relevant 28:10 141:4,7 reliable 44:4,5 relied 24:13 154:24 religious 5:5 46:23 48:22 74:11 97:22 147:12 remarkably 126:20 remember 33:2,4,7 33:10 44:2 53:12 55:7 56:5 94:6,14 remembering 57:8 102:24 Renaissance 1:20 render 48:24 49:14 50:2 rendered 180:20 rendering 58:1 98:10,11 repeat 158:11 repeated 46:12 repeatedly 70:21 142:6	rephrase 5:21 26:23 45:5 report 6:21,22 7:5 11:9 12:11,17 14:11,13 15:21,22 16:3 17:14 19:17 19:21,23,24 20:15 21:17,22,23 22:4 22:11 23:12,15,24 24:11,15 25:3,13 27:18,21 28:4,8 33:14 35:14 36:6 36:8,10 38:21 39:6,23 40:5,7,9 41:4 42:5 52:6,8 53:11,12 55:2,3 55:18,19 56:4,9 56:24 57:1,6,12 59:12,15,16,16,19 59:20 60:17,23 80:19,23 82:7 93:21 100:8 101:1 101:6 103:25 104:9 132:24 145:12,13 150:10 150:15 164:12 168:19 174:22,23 174:23 176:7,12 190:9,13 194:6 reported 60:23 reporter 1:22 194:18 195:3,24 reports 27:17,24 35:20,22,23 39:19 41:13,14,17,18 42:4,24 43:1 51:8 51:10 52:2 53:11 53:16,19 54:21 59:18 100:25 101:2,11,13,16,17 101:24 104:4 142:8 149:2,10 163:3 166:2 180:4 180:5 represent 5:1 representation 124:11 129:10 representations 87:13 represented 121:2 representing 5:6 121:20,21 reproductive 130:9 130:17 140:16 request 5:13 require 135:13,24	required 87:3 127:7 141:7,8 174:21,21 requires 178:23 179:1,5 research 7:16,21 14:23 15:2,3 53:24 55:16 58:4 94:24 96:1,8 104:7,13 146:9,11 148:1 189:18 192:1 researchers 85:18 104:6 191:25 researching 102:5 102:10 resolution 10:1 19:5 27:2 resources 15:16 63:24 respect 82:22,25 respected 61:5 152:24 respond 6:6 34:9 109:10 responding 31:17 35:24,25 36:2 68:1 response 29:9,10 170:25 174:14 responses 6:2 responsibility 12:25 13:2 16:18 81:1 rest 21:12,15,20 83:5,7 rests 118:7 result 10:2 70:11 77:16 143:12 159:22 192:3 resume 17:17 119:20 181:10 resumed 100:6 review 18:25 19:16 22:3,8 23:6 24:1,6 28:9 30:6 43:16 43:17,18 53:21 54:1,9 163:20 164:13 reviewed 39:4 54:2 135:16,17,23 reviewing 121:13 revolves 124:13 rewritten 173:12 re-read 180:25 RICHARD 2:10 right 14:12,19 17:12 19:7,14 26:17,25	34:17,22 40:8 43:25 56:1 57:2 63:6 68:12 69:10 70:15,18,20 71:12 72:5 73:3 75:13 77:14 79:21 80:8 81:12 88:22 89:20 90:13 94:7 98:11 98:21 102:14 105:12 109:6,9 111:20 112:15 115:20 119:14,15 120:7,12 123:3 124:2 129:1,5,7 129:17 130:12 131:2,4,14,21 144:16 145:7,15 148:17 150:16 166:3 171:11 172:1,14 173:14 175:6 179:19 180:12,23 186:22 189:11,25 190:25 192:16 194:15,23 Robert 20:22 rule 131:18 157:18 181:9 rules 131:17 S S 3:9 7:16 safe 73:11 129:24 139:19 safely 139:19 same 6:5 10:21 32:9 57:24 58:5 62:19 70:5 95:8 104:17 105:13 114:24 122:18 123:7 124:1 125:10 143:4,5 154:24 187:24 Sanforum 175:22 175:23 satisfy 66:19 saying 23:17 30:16 30:25 31:17 32:9 50:24 62:21 67:1 67:18 74:23,25 75:15 77:14 78:6 79:14 81:5 83:6 83:11,11 88:9,16 88:18 95:4 104:8 104:16 109:21 113:13,13 115:25 120:8 121:16
---	--	--	---	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

18

123:5 124:15 125:13 127:6 128:19 137:4 139:18 140:19 163:23 167:25 168:4 176:12,15 188:23 192:17 says 64:7 70:3 71:5 71:12 74:9,15 75:5 81:10,18 82:22 83:13 84:3 85:3 87:18 89:13 89:21 97:20 107:10 108:11 118:6 120:1 130:10 135:2 138:22 140:16 143:16 157:2 158:23 159:4,5 185:25 scales 144:11 scan 100:8 scheduled 26:25 scheme 105:3 school 1:12,12 4:12 5:4 7:25 8:3,25 9:15,17,20 10:5 10:24 11:16,24 21:10 26:4 36:16 64:24,25 65:14 66:11,12,22,24,25 67:1,4 68:11 69:9 69:12 70:15 72:19 80:6,8,14 87:3 91:2 96:22 97:12 97:17 99:17 101:25 104:3 123:6 125:22 127:20 130:19,22 130:25 131:3,5,8 131:9,11,22 132:19 133:5,18 133:19,22 136:8 145:16 151:14 153:4,14,25 160:17,22,22 161:20 171:24 172:11 184:11,18 185:6,8,9 schools 4:23 5:2 7:25 8:3,15 63:13 130:23 131:24 152:25 153:23 174:10 school's 141:24 science 3:13,15 8:4	8:7,10,12,13,17 8:21,22 9:7 14:7 15:7 16:19 19:19 28:7 31:19 33:12 36:14,20,25 37:15 37:22 38:16 43:22 45:14 55:9,14,15 55:22,25 56:2,7 56:12,22 57:3,12 57:14,18,22 58:12 58:17,23 59:5,9 60:21 61:2,23 62:2,3,10,16,20 62:23,23 63:4,8 64:3,3 74:2 84:11 84:20 89:5 94:15 94:16,17,19,20,21 94:22,25 95:3,5,5 95:9,11,12,13,19 95:22,24 96:2,14 96:17 97:4,9 99:9 99:10,11,12 102:12,13,17,24 103:16 106:7 107:11,11,15 108:3,5,7,23,24 109:2,6,8,12,14 110:3,6,7,9,10,11 110:15,18 111:23 112:1,3,20 113:3 113:11,12,14,21 113:24 114:5,7,10 114:11 118:10 121:23 122:3,8,17 123:24 124:19,23 131:19,20,23 136:21 149:21 151:1,16,24 152:2 152:7 157:3,18,20 157:24 158:24,25 160:1,17,20,21,22 161:7,20 162:2,21 163:4,9,11,12,17 164:23 165:2,13 165:19,21,23 167:3,5,12,16,21 167:21 175:8,9,11 182:4,14,18,21,22 182:22,23 183:25 184:3,7,7,12,14 184:16,20,22 185:17,19,22 186:2,3,8,15,18 187:2,9,11,14 188:2,4,6,9 189:12,15,18,21	190:11 191:2 193:5 sciences 55:11,17,20 55:23 57:25 95:14 108:12,15 110:10 110:12 112:12,13 114:12,14 154:5 155:14 science-related 186:6 scientific 43:10,13 45:18 49:7,15 50:21 57:20 59:4 85:2,16 89:14 100:10,11,14 101:21,22 102:3,9 103:23 104:6 105:2,4,7,22 106:1,2,3 113:18 114:6 117:3,5,7 117:17,18 118:6,8 118:12,17 159:1 159:19 160:11 162:15,19,23 163:7 174:13 191:1,8 192:6,22 193:2,11 scientist 49:9,14 109:11 scientists 30:8,19 43:19,21,23 63:2 83:15 101:23,25 104:14 109:12 110:20 111:11 112:5,7 114:9 125:3,6,13,15 161:6,9,11,12 167:10 scope 35:3 41:11 scores 23:7 Scott 164:8,10 search 163:20 Seattle 156:21 second 4:21 12:23 15:23 38:21 47:2 96:21 157:17 170:3 section 23:13,19 86:4 106:24 190:18 secular 160:16,22 160:25 161:20,23 see 12:19 22:12,17 23:18,19,20,20 24:6,9,18 29:21 35:4 59:1 78:24	82:19 98:2,15 107:4 138:23 142:6 149:17 162:6 168:18 182:25 193:21 seeing 27:13 seem 42:12 69:4 seemed 183:17 seems 45:13 47:24 51:25 97:22 158:12 166:24 173:9 seen 33:25 156:19 162:25 172:24 select 30:7 selection 45:19 142:25 self-evident 75:4 self-organization 143:14 149:16 self-proclaimed 94:3 99:13 semesters 183:3,4,8 Senate 176:1,2,8,22 177:12,25 178:1 sending 139:3 sense 8:1 31:5 44:12 44:14,15 48:8,21 48:22,22 49:10 52:9,10 55:24 69:15 70:12 74:18 78:7,8,16 90:14 90:23 91:2,3,12 91:12,14 111:7 134:21 148:18 151:7 152:21 164:20 170:14 174:17 176:1 177:12,25 178:1 179:21 senses 35:10 sensible 91:15 sentence 83:5 143:23 144:8 157:17 separates 70:7,7 September 27:1 193:22 series 41:25 183:6 service 54:12,13,16 93:7,16 set 12:9 167:17 195:18 setting 168:17 settings 53:22,23 seven 24:11 174:24	several 48:3 84:9,10 133:4 192:24 sexual 130:9 share 91:17 Shaw 159:5 she'll 141:17 shifting 69:6 short 11:7 56:20 118:1 147:5 156:4 190:4 Shorthand 195:24 shoulders 6:2 show 6:17 106:19 132:13 143:16 148:8 156:18 172:23 181:19 shown 132:4 shrugs 6:1 side 169:9 sides 51:8,9 sign 194:9 signed 177:16 significance 21:8 significant 29:4,19 31:8 signing 194:8,14 silent 126:11,12 similar 22:19 85:24 106:4 133:6 154:16,22 179:17 simple 81:2 190:16 simply 128:22 141:15 since 163:27,21 28:4 57:12 60:17 145:22 160:22 176:18 single 106:2 160:21 171:21 sit 57:2 72:4 80:8 180:12,22 site 59:25 60:1,3,4 102:22,23 103:17 situation 12:14 situations 123:2 six 174:23 skills 170:6 skim 22:8,10 23:6 24:1,9 107:8 skimmed 21:17 23:24 89:2,11 slacker 194:20 slash 66:10 112:3 smaller 142:20 SMITH 1:7 SNEATH 1:6
--	---	--	--	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

19

Sober 29:11,13,19 29:20 31:8,18,22 37:2 38:17 51:6 51:19 52:2 100:17 100:20 104:21 191:3 192:25 193:9,18 social 154:10,14,15 societies 55:10 58:18,23 61:24 62:17 63:9 99:10 99:11,12 152:10 152:19 153:15 162:2,22 163:5 society 140:17 167:13,17 188:7 188:10 sociological 112:7,9 112:10 191:21,22 191:23 192:19 sociologists 112:10 191:25 sociology 45:15 192:9 solid 31:2 solution 12:15 some 5:11 11:20 12:17 17:4 18:7 18:24 27:18 28:12 28:13 30:24 33:17 34:20,25 35:25 36:1 37:19 40:21 40:21 42:14 44:25 45:1,1 53:22 54:11 59:7 66:5 67:23 69:5,6,18 69:19 70:13,19 71:1 72:12 77:1 77:17 79:22,24 83:4 88:9 91:16 92:15,16 93:5 98:9 101:5 110:17 112:5,7 114:7,7 117:1 121:23 122:6,24,25 123:5 123:18 124:2,15 125:21 128:22 130:13 131:7 141:22,25 145:14 149:25 153:19,20 155:4,4,10 160:14 161:10 168:10,11 168:11,16 170:13 170:21 171:7 173:23 174:15 177:6,7,10 179:13	188:12 somebody 46:3 61:7 64:25 111:13 131:18 something 5:19 6:24 10:10 21:5,10 24:7 33:8 36:16 38:8,14 42:18 43:3 47:5,16 58:1 66:23 67:18 70:22 70:25 71:9,11,20 71:23 75:21,24 76:6,23,24 81:2 86:21 88:7 96:1 107:1 115:11 119:10,12,13 120:10 121:20,21 123:19,20 125:1 125:24 127:1,4 129:11 130:5 131:3 141:9 147:17,24 151:23 169:14 170:20,23 171:5 174:2 176:12 194:17 sometimes 170:15 170:15 177:23 192:3 somewhat 16:11 106:4 somewhere 90:12 127:18 sophisticated 155:7 sorry 15:24 22:14 24:21 35:23 39:22 60:5 85:8,25 103:21 114:13 117:21 147:20 151:11 154:8 164:16 169:7 177:22 182:11 183:14 190:12 sort 17:23 41:21 130:11 170:13 172:2 sorts 171:22,23 sound 16:24 130:5 160:9 175:21 192:5,10 sounding 52:3 sounds 38:18 85:23 source 44:9 146:15 sources 22:23 36:17 44:6,7,7,8 82:14 104:17 145:15 174:22,24 175:2	175:14,17 so-called 59:3 61:17 span 126:18 speak 86:19 87:9 144:5 176:9 187:5 speaking 12:6 32:17 153:8 175:25 speaks 11:9 86:20 147:25 specialty 62:23 species 48:14,16 50:11 85:20,20 164:22 specific 8:2,10,13 9:6 26:7 35:16 45:5 60:10 67:9 84:10 88:23,24 95:24 96:7 108:9 130:16 135:12 142:24,24 147:18 152:25 166:16 193:16 specifically 10:12 13:8 19:18 20:2,4 23:5 36:3 52:6 55:4 77:12 87:20 97:2 111:8 140:18 143:1 153:9 162:12 167:20,24 170:1 175:14 182:14,20 188:18 specifics 148:15 specify 35:16 speculating 180:10 speculation 77:24 79:24 82:4 90:17 118:20 138:17 139:6 speculative 140:8 159:10 speech 5:4 spell 28:23 spend 7:4 127:10 132:21 133:22 141:10 155:21 spending 127:9 Spoken 93:20 sponsor 102:19 sponsored 163:25 spout 53:5 Springs 183:25 186:13,18 staff 66:13 67:21 stamp 54:8 stand 27:4 28:2 58:7 119:18	standard 16:22 130:10,13 132:23 141:11 151:3 standards 3:14 13:7 13:7,13,14,18 14:7 16:19 19:18 28:7 33:12 36:15 36:20 37:1,8,15 37:23 38:17 55:15 55:22 56:10 59:5 66:15,16 67:12,22 69:12 99:10 114:23 123:18,20 123:23 124:18 125:23 126:3,11 127:2 130:7,12,14 130:15,16,21 131:7,12,13,24 132:1,8,11,18 133:1,13,24 134:5 134:8,9,12,20 135:5,13,18 136:22,22 137:4 140:15 141:4,6,13 151:9,14,17,19,20 151:20,21,25 152:2,4,7,10,19 153:3,4,5,7,10,12 153:13 154:4,9,14 154:20,21,22 155:2,3,7,13,19 155:23,24 156:11 167:3,18,21,22 175:2,4,5,5,6 185:2,14 191:2 standing 139:7 stands 58:9 65:25 137:8 start 6:9 37:25 67:5 80:12 140:20 182:3 started 144:2 starting 39:4 82:23 83:6 184:10 starts 157:14 state 13:8,13 16:18 19:18 37:8 66:15 66:16,17,23 67:12 124:17 125:23 126:2,9 130:7,13 130:13,15 131:11 131:24 132:8,11 133:24 134:5,8,20 135:13,18 136:3,5 136:6,14,15,16,22 141:4 151:21	152:5,5 153:6 154:3 155:3,8,23 195:1,19 stated 17:14 82:22 statement 9:21 10:7 10:9 13:4 18:2,16 18:18,19,22 19:3 19:7,13 60:15 64:12,21 65:5,8 66:2 72:6,21 74:17 77:13 78:10 78:12 79:3,25 82:20 84:2 85:22 86:1,14,17 87:3 87:16,21,22,23 88:13 89:24 90:2 90:6,18,20 91:24 93:6 97:14,19 115:13 117:14 124:5 133:6 134:10,18 141:16 176:14 statements 140:4,6 174:5 states 1:1 86:20,21 123:22 130:24 152:25 153:10 154:20 155:10 176:8,22 statistics 137:18 stats 14:23 stature 70:13,19 status 13:15,19 14:5 34:6 133:3 134:13 134:25 statute 177:17 178:22 179:4 Steel 29:11,13,19,20 31:18 37:2 38:17 51:6,19 52:2 100:17,17,21 191:3 192:25 193:9,19 Steel's 31:22 104:21 stenography 195:9 Stephen 156:23 STEVEN 1:6 still 14:16 45:20 78:18 85:19 109:24 111:18 129:25 186:12 stood 77:25 139:25 stop 18:4 19:1 STOUGH 1:6 straight 9:16 Street 2:5
---	---	--	---	---

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

20

strengthen 54:17	137:20,25 139:4	62:11,17 63:9	153:25 154:14	87:21,22 102:17
Strengths 190:19	139:12 151:17	134:8,10 137:4	173:1 182:20,23	134:19 164:16
stretch 177:3,5	155:18 156:6	161:3,8 175:14	183:3,25 184:3	165:20
strikes 15:12 160:15	158:19,21,25	179:16,25 180:13	187:22 190:2	tall 160:18
string 110:25	159:18,22 160:4,5	180:18	taken 56:22 57:6,15	TAMMY 1:5
188:19	160:7,9,12,14	supported 64:3	57:19,23 61:11	taught 9:6 13:10,12
strong 159:23 167:9	164:19 166:18,20	134:19,21	167:13 195:6	13:15 18:14 24:24
structure 12:18	167:18 168:21,22	supporting 134:12	takes 47:22 49:11	37:4 50:8 52:17
student 5:4 15:19	168:23,23,24,25	supports 39:5,9	60:22 61:17	57:15 76:4 86:17
57:15 71:16 78:24	169:1,14,23	53:6 137:7	163:13,15 166:21	87:2,19 114:23
79:24 80:20,24	170:25 171:4,20	suppose 72:9 112:16	taking 24:17,18	115:2,7 120:21,24
120:22 138:23	172:3 175:15	supposed 97:25	29:21 32:7 49:12	121:2,5,6,10,15
171:8	190:10,14	supposedly 109:4	talk 7:15 12:24	121:23 123:21
students 12:20,24	studied 52:7,9	supposition 26:14	16:16,17 23:5	124:12 125:14
13:2,5,8,14,19,23	studies 154:11,14,15	31:22	25:6,10,12,25	127:8 131:19,20
14:8 15:3,9,15,17	study 167:10	sure 5:10 8:5 11:6	26:4 32:13 38:25	131:22 134:1
16:17,20 18:2,11	studying 111:17	11:12 16:12 19:8	39:3 41:18 51:15	150:7 164:18
18:20,22 19:3,9	stuff 42:4 97:1	21:7 22:16 28:22	51:23 64:7 71:20	166:5,11 167:18
36:11,12 37:9,13	subcategories	41:16 43:15 62:24	76:10,16 80:1,19	172:8 185:4
37:16,18 38:13	193:14	63:3,3,3 95:7,7	85:10 94:23 100:9	186:15,21 189:12
49:8 50:7 63:22	subcategory 165:6	105:9 107:3	115:9,16 137:18	189:15,21
63:24 64:2,13,20	subject 28:6 105:13	108:20 117:24	142:8 150:15	teach 7:21 63:13
65:6,8,20 66:6,17	154:4 158:6	136:15,19 153:9	152:10,13,15	68:10,11 73:4,7,7
66:21 67:6,10	submit 54:14	154:13 176:13	155:18 156:8	73:12 74:10,14
68:11 69:8,24	submitted 6:24 28:8	179:13 182:9	164:15,25 192:25	75:2,24 76:2,6
70:22 71:1,1,6,8	33:23,25 34:2,7,8	185:2,3 193:20	193:9 194:8	81:2 86:7,9,13
71:11,13,21 72:12	34:21 35:5,7 41:4	surprised 156:14,15	talked 9:24 25:23	97:21 114:17
72:19 73:2,4,12	101:24	surrounding 13:24	36:10,18,24 37:3	115:10 116:2,7,12
73:15,23 74:4,17	submitting 34:4	190:18	62:22 65:12,14,16	119:11 120:8
74:19,24 75:1,4	subscribe 47:9	suspect 145:23	65:18,20 72:11	122:4 123:19,22
75:13,14,16,24	141:25	166:20,22 168:1,2	80:14 82:14 93:17	123:24 125:20,24
76:3,4,11,12	subspecialty 8:17	sworn 4:6 195:7	93:19 94:3 99:13	125:24 126:25
79:10,16,20 80:24	substantial 194:1	syllabus 92:24	99:17 106:4 107:7	129:23 130:18,25
81:1 82:22,25	substantive 194:17	symbol 129:10	119:24 137:12	131:3,6,6,15
83:9,14,14,21,23	substantively 78:11	synonym 75:11	140:2,13 145:11	132:19 133:9,16
84:1 87:4,18,19	179:10	synonymous 129:9	148:19 157:1,9	134:23 136:21
88:7 89:25,25	sub-discipline 8:18	system 46:13,19,20	164:20 165:25	137:19,23,24
90:6,24 91:4,17	8:20 63:5 93:14	147:23	179:11,20 186:23	138:1 140:16,17
91:18,20 92:4,6	96:3	systematic 66:5,8,20	talking 6:5 9:17	141:14 150:8,25
92:11,14,16,19,23	sub-disciplines 9:3	67:9 73:24	19:20 23:16 25:14	155:16,16 156:15
93:2,6,10 111:10	sub-discipline's	S-a-b-e-r 29:13	31:16 40:16,17	157:24 158:5
114:17,23 115:2	113:10	S-t-e-e-l 129:14	44:7 48:10 51:12	160:17 184:11,19
116:7,12 117:15	sub-opinions 15:13		51:20 65:5 73:8	185:11,17,22,24
118:5,24 119:17	16:15 17:2 175:20		73:16 76:22,24	186:2,3,19,23
120:5,18,25	suggest 134:15		78:16 88:2 94:20	187:1
121:10,13,17	swing 5:4	T 3:9 4:5,8	94:25 95:4,11	teacher 65:25 70:1
123:16 125:20,25	summarize 32:21	tab 165:5	108:11 109:6	70:3,13,17,19,21
126:9,13,17,18,19	summary 117:12	table 89:18,19	114:11,13 122:3	70:25 71:5,8,12
126:20 127:1,11	supernatural	take 5:18 6:1,5 13:2	133:21 136:4	71:16,20 74:10,18
127:18,19 128:7,9	112:18,21,22	17:23 34:22 35:10	137:7 140:25	77:25 97:20
129:13 130:6,10	113:4,12 147:7	52:12,12 56:17	153:6 164:13	119:18 120:1
130:17 132:22	150:19,25 152:11	73:14 75:22,25	165:9,10,17,18	124:12,19 125:15
133:16,18,21,23	158:5,13 159:7,17	76:3,5 77:2,17,19	173:17 182:10	126:5,7,12,24
134:8,11,13,15,22	160:3,10 191:19	77:23 90:5 92:16	188:18	127:4 139:25
134:23 135:10,14	support 51:10 52:19	92:19 103:8,11	talks 13:22 14:4	140:4,5,11,18
135:24 136:2,17	57:3 58:18 61:24	107:9 117:21,22	20:3 85:7 87:21	141:15 168:24,24
		144:14,21 147:3		

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

21

169:4,13 171:7 188:14,17,18 189:2,3,4 teachers 10:9 19:3 59:9 60:22 61:2 61:10 63:4 65:12 66:13 71:18 86:5 92:13 97:13,17,18 97:24 103:16 125:20 126:16,19 126:22 131:5 141:9 164:23 165:3 168:25 171:3 185:1,4 189:5,13,16 teaches 89:10 118:5 133:7 teaching 15:14 37:8 38:5,7 49:4 56:3,7 56:14,23 57:3,9 58:15,18 59:2,2 59:10,14 60:6,12 60:13 61:12,14,18 61:20,24 62:4,11 62:18,21,23 63:10 63:13,17,21 64:8 66:2,3,4 67:14 68:2,3,4,16,16,19 68:20,25 69:7,17 69:18,20 70:9,11 71:24 72:1,18 78:3,15 79:7 81:7 102:4,11 115:24 116:5 117:11,13 117:15 119:15,16 119:23,23,25 120:2,4,10,11,15 120:17 124:4 128:9 130:11 132:20,20 133:19 134:4 137:18 139:8,25 140:3,19 141:15,17 166:14 171:15 174:10,12 174:18 175:17 178:23 179:2,5 187:19 188:21,22 189:12,15 technology 3:15 19:19 185:25 telephone 130:2 tell 5:20 9:9 11:19 22:24,24 28:18 32:15 39:14 45:11 46:19 50:6 90:3 92:23 95:25 100:2	103:25 107:12 109:15 121:17 125:20 126:13,22 126:22 128:11 129:19,25 137:20 142:2 158:19,25 159:18 162:8 164:24 173:15 187:5 195:7 telling 36:11 60:7 64:18 79:11 83:9 83:14 115:20,23 128:9 130:1 134:8 134:12,15 139:11 139:12 158:21 tells 20:4 tempo 167:10 tends 53:24 tenets 30:9,10 tenor 21:19 tens 23:7 term 45:18 94:23 95:20 106:7 127:23,25 128:5 128:17,19,22,24 129:5,8 142:6,25 terminology 8:19 terms 12:18 51:14 64:12 86:22 94:24 112:13 128:25 191:20 test 29:23,24 30:3,3 30:22 31:2,6,23 32:9,12,14,15,18 32:21 33:7 51:21 83:16 113:15,20 116:19 136:1,6,16 146:11,14,15,17 146:22 170:22 testability 28:12,19 33:6 113:21,25 testable 29:22,22 113:18 114:6,10 tested 13:9 37:10 66:21,22 67:22 76:11 78:19 83:13 87:19 88:7 105:14 126:21 127:3,7 133:22,23 134:2 172:9 testified 4:6 testify 26:9,12 179:9 testifying 49:3,6 testimony 3:12 180:1 194:2 195:6 195:7,10	testing 29:1,16 30:20 31:24 32:1 191:4 tests 136:5,14,15,15 136:16 Texas 135:21 text 20:1 21:9,20 36:15 85:6,16 86:4,20 87:5 89:2 92:9,11,12 107:1 107:5,10 167:3 190:17,21 textbook 20:7 84:21 84:25 87:2 90:4 160:21,22 161:1 textbooks 160:17,20 161:21,24 texts 23:16 thank 4:13 28:1 43:2,2 56:19 114:2 117:25 133:3 163:10 Thanks 8:19 their 12:25 13:3 30:17,19,20 31:25 32:8,18,20 57:8 59:1 60:1,3,4 64:5 69:8 72:16 79:11 81:2 85:6 93:13 93:13 101:1 118:15 123:22 129:19 131:18,25 131:25 132:1 144:10 151:8 152:25 154:1,2,2 154:21,22 160:15 169:15,24 170:2,6 170:12,18 172:6 172:10,19 175:12 195:14 theirs 152:5,5,5,6 themselves 86:19 87:10 131:10 154:19 168:25 theologians 161:7 theoretical 110:17 111:14 theories 13:16 14:6 15:15 18:12 36:12 63:23 64:16 83:13 84:20 89:14 105:4 105:7,13 111:13 133:4 134:7 137:6 theorizing 26:13 27:11 theory 13:17,19,20	14:6,9 15:14 18:12 20:5 21:2,3 21:6 29:22,24 36:13 37:14,17 39:25 40:1,2,23 42:7 43:12 49:17 49:18,22,23,25,25 50:3 54:2,3 63:22 64:15 73:25 75:6 75:8 78:18,18,19 78:20,21 80:2 82:22,25 83:15 84:5 85:2,16,17 87:6,22 90:25 91:6 94:4 105:2,8 105:10,10,11,22 106:1,2,3 110:25 117:3,6,7,17,19 118:12,18 124:19 124:20 125:14 133:7,9 134:13 135:1 137:7,8 145:21 147:1 148:4 156:7 160:10 164:15,15 164:17 172:16 174:13 190:15,20 191:7,8 thereabouts 120:23 thesis 115:9 thesis/antithesis 121:19 thing 5:25 12:22,23 13:6 14:3 21:24 41:2 42:6 49:5 58:5 73:16 86:16 86:20 88:11,12 91:15 93:9 112:11 125:21 149:23 150:3 160:4 165:22 things 7:11 22:17,19 23:5,8,18 24:2,18 24:23 27:20 31:1 31:18 33:13,16 36:9,19 40:13 46:1 67:13,15 71:19 75:13 76:2 76:4,16 81:5 84:9 84:10 85:3 88:19 90:2 92:13 93:16 96:20 99:7,25 103:18 104:19 105:3 106:8 112:2 115:5 122:21 123:17 125:18	126:20 133:22,23 137:22 140:12,19 143:12 149:22 165:25 168:16 171:22 172:5 179:15,24 180:25 184:25 188:19,24 193:20 think 4:23 5:9,12 10:2,17 12:7,18 12:20 15:22 16:4 17:10 18:7 25:18 31:7 33:24 34:4,6 34:15 35:10 37:18 41:12 42:9,18 46:17 47:16 48:2 48:8,20,21,21 49:11,13,17 52:18 56:4 57:5,8 59:19 62:13 67:17,17 68:14 72:14 73:14 81:17 83:3 85:15 89:25 92:4,6,7,9 93:10 94:8,18 95:17 96:11,13 103:18 107:16 109:15 110:1 116:9,14 118:9 123:13 124:15 126:17 128:16 133:20 134:9 137:12 143:4,8,10 146:9,14 147:13 147:22,22 148:18 148:24 150:11 151:7 153:19 161:9 162:6,17 164:8 165:5 166:4 166:18 167:1,2 168:4 169:11,13 169:18 171:20 172:12 174:20 175:19 176:9 179:8,10 180:2,12 180:13,22 182:24 183:6,7 187:21 190:3,6 191:6 192:13,25 thinking 12:11,12 12:19 16:17 24:16 25:12 36:24 69:23 76:14 80:20 81:1 81:15 82:12,21 83:9,18,19,19 84:7,9,12,15,18 84:22,24 85:1,18
--	--	--	--	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

22

86:24 88:6,8,14 88:17,18,25 89:14 89:22 122:12 153:24 159:25 168:6,8,11,12,17 169:23 170:4 171:23 third 13:6 134:18 thirteen 186:17 Thomas 2:11 38:23 Thompson 2:10 9:22 10:11 11:6,8 11:14,22 14:18 16:8 17:7,18 25:21 26:24 27:24 33:21,24 34:3,17 34:22,25 35:4 41:10,21 45:4 48:2 49:13,19,22 59:19,22 62:5 63:16 64:7 68:1 73:6 74:6,9,13 75:8 77:20 79:23 81:9,12,16 82:3,9 86:3,19 87:5,9 90:17 106:11,21 107:16,22 108:4 108:16,20,22 109:9,18,21 110:1 113:22 114:19,24 118:20 122:23 125:8 128:16 135:7 136:25 137:2 138:7,17 139:5,14,22 140:7 140:21,24 143:8 145:5 146:5 147:4 148:11 151:2,6 156:25 158:7 159:9 160:6 164:11 173:6,13 174:1 176:9,14 180:15,18 181:16 192:13 194:10,13 194:21 thought 27:24 28:10 59:17 70:2 122:24 123:6 three 14:22 64:18 72:15 182:11,13 through 9:11,12 11:21 12:4 17:23 19:24 23:7 25:1 27:12 28:7 30:6 32:24 38:3 54:15 55:23,23 59:12	73:23 89:2,11 137:6 144:10 170:14 187:13 throughout 67:8 throw 137:10 169:16 time 1:19 6:5 17:3 19:25 20:11 38:2 38:3 42:3 45:13 45:14 48:9 77:2 92:18 99:24 100:3 122:19,24,25 123:7 126:18 127:9,10 132:21 133:21,23 135:9 141:10,10 142:13 142:16 155:21 times 76:16 137:13 156:21 183:17 tired 192:20 193:20 title 24:6,7 29:1,16 29:20 60:11 today 4:12 28:5 45:22 113:3 together 187:23 told 65:3,8,10 80:17 120:22 128:1,5 131:6 tomorrow 76:15 top 53:1 161:19 164:1 topic 17:10 24:8 68:10 137:13 148:23 154:9 topics 42:1 153:14 totally 73:7 123:1 Touchstone 148:9 trail 50:9 68:15 training 189:22 trait 78:2 transcribed 195:9 transcript 195:10 transmit 73:1 93:5 trial 9:14 26:9,12,25 27:3,10 179:9,18 Troy 195:18 true 90:8 124:11 130:23 195:9 truth 125:12 195:7 try 6:6 79:10 111:21 118:3 trying 10:11 23:15 68:8 72:17 120:18 123:15,16 146:20 154:12 192:13,21 Tuesday 1:18 4:2	turn 106:24 107:9 twice 162:9 two 37:18 64:15 72:13 87:9 93:12 96:13,20 115:16 115:16,20,20,21 115:21,24,24 116:2,2,6,6,7,8,11 116:11,12,13,17 116:17,18,18 119:19,19 120:7,7 120:8,8,9,9,19,19 122:21 123:1 140:4 163:15,16 163:21,21 169:25 169:25 171:8 183:4,8 tying 83:20 type 52:3 97:9 155:9 156:14 types 9:1 83:3 typically 23:6 47:2 47:6 94:23 105:24 115:6 130:14 170:13 192:2	undergraduate 52:16,17 183:2,23 understand 5:20 8:5 9:13 11:12 14:8 15:9 16:12,20 23:14 24:1 25:15 37:14,17 62:24 67:17,18,20 73:24 74:23,25 75:5,7 75:15,16,21 77:13 91:5,19,21,21 111:21 128:7 136:19 140:23 150:9 153:8 166:18 172:17,19 192:21 understanding 13:25 15:4,10 21:9,19 25:20 27:18 34:10 42:3 42:20 50:15 64:9 64:11,21,24 69:14 70:9 75:11 76:25 77:7,9 79:1 89:12 89:13,15,17 92:1 95:2,5,7,9 105:6 109:7 110:7,7 113:10 114:4 120:19 128:23 129:20 138:25 142:12,23 144:3,4 144:13,19 147:25 149:5,10 150:23 151:12 157:22 161:10,14 166:7,8 178:2 understandings 15:1 68:16 77:6 83:22 understood 5:23 6:8 7:6 86:6 106:7 113:3 unfolded 40:17 unfolding 40:18 Union 2:4 unit 68:10 United 1:1 176:7,22 units 67:8 universe 46:8 51:25 52:4 100:19 124:12 university 138:1 160:25 161:23 183:8 185:16,22 186:12 unless 11:10 70:17	91:4 109:24 unlikely 194:18 unpackage 22:14 unquestioned 121:21 unquote 93:17 179:5 until 5:16 6:6,7 103:11 updated 105:23 upset 140:11 upshot 30:2 use 24:3,4 32:2 37:16 76:14 121:22 123:16 129:5 142:6 171:3 used 62:6 122:25 123:1 126:22 149:19 190:23 191:20 using 73:6 145:17 150:5 191:20
V				
v 4:23				
vague 16:8 17:8 48:5 106:12 114:19 130:11,12 139:23 140:7 151:2 160:7 173:6 180:16 valid 91:16 117:7 125:14 159:1 value 24:4 73:15 86:18 93:5 144:14 144:21 153:17 variants 137:19 various 13:6,16 17:24 22:3,12 59:6 60:4 88:1 144:1,9 154:17 165:9 167:2 193:14 venue 97:3 verbatim 89:4 version 33:1 145:16 versions 145:19 versus 4:11 41:7 115:10 116:22 191:19,21 very 13:10 22:19 23:3 67:9 77:6 93:3,10,11,12 122:2 126:22 154:16,22 157:12 157:18 159:21				

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

23

173:6 Vic 4:10 Vice 185:15 view 61:3 78:23,25 79:4 138:24 143:24 156:9 177:23 views 45:22,23 visited 60:1,3 102:22,25 vita 3:24 54:5 181:23 182:1 vote 176:2,5 voted 176:16 vs 1:10	140:10,22 141:1,2 143:10,15,19 145:7,9 146:8 147:6 148:7,12,16 151:5,10 156:17 156:24 157:4 158:9 159:11 160:8 164:14 172:22 173:8,14 173:18 174:7 176:11,17,20 180:17,19,21 181:15,18 190:2,5 192:18 194:8,11 194:16,23 walk 9:11 12:4 32:23 120:19 159:23,25 walked 121:10,14 121:18,24 122:5,7 122:18 123:7 want 5:10 9:11,12 10:4 11:10,12,18 11:22 29:5 32:13 32:17 34:5,15,22 35:6 39:3 41:16 43:7 46:23 49:14 51:13 54:9 67:6 69:4 71:8,11 74:19 75:13,15,16 76:2 84:16 85:13 92:14 94:5,5 95:7 99:8 103:2 109:22 110:6 111:21 119:11 123:15 129:20 136:19 141:18 151:12,20 156:7,8 157:13,13 163:13 168:6 170:1,3,5,11 173:1 176:10,11 184:9 190:6 193:21 194:8,9,13 wanted 41:11 Washington 177:2 wasn't 32:6 91:10 97:2 wave 133:9 wavelength 95:8 way 9:12 11:2 38:3 45:24 52:18 68:12 68:12,13,13 73:8 77:9 78:2 79:22 83:8 95:15 106:5 112:19 116:5 117:9 120:21	131:4,14,14,14,15 131:21,21 146:14 148:23 153:20 161:8 171:1,4 173:9 181:4 Wayne 195:25 ways 12:7,17 14:13 14:24 15:5,9 16:21 32:2 54:11 80:25 85:18 105:5 128:18 150:15 153:19 weaknesses 81:3 190:15,19 web 59:25 60:1,3,4 103:1,6,17 165:2 165:5 Wedge 3:18 147:17 148:10,13 week 76:15 weigh 83:2,3,16,17 83:24 111:12 160:13 weighed 167:2 well 7:21 8:13 10:4 10:19 12:4,6 13:5 14:4 15:3 18:1,20 19:15 21:9 22:3 23:2,3,3,17 24:16 26:10,16,23 27:11 30:25 31:9 33:4 38:8,24 39:18 40:2,6 41:6 42:24 43:9 44:13 45:18 47:13,13,24 48:8 49:3 52:6 56:6,25 60:3 62:9,13,22 64:7 66:21 67:4 67:20 69:4 72:11 73:10 74:24 75:9 76:22 77:3,12,21 77:25 79:19 80:12 84:10 85:11 86:17 86:22 87:11,18,25 88:21 90:14 92:6 95:25 96:8,21 97:2,20 100:15 102:2,19 105:6,17 105:22 107:4 110:23 111:7,16 114:1 115:2 118:17 119:7 121:10 123:13,22 124:24 125:4,18 127:16 128:21 130:13,25 131:5	131:18 133:20 136:6,15 137:12 138:10,22 142:12 144:8 145:6 149:25 150:11 153:12,24,25 155:1 156:8 158:19 165:17 166:24 168:18,22 170:11 173:22,25 174:8,12,15 176:11 178:10 179:10,22 180:2,5 180:6,25 182:11 184:25 192:10 193:9 well-run 151:25 went 31:21 59:21 were 5:6 22:22 28:11,12,19 29:10 29:20 30:15,15,20 31:16,17,17 32:6 33:20,24,25 34:4 34:7 35:14,24,24 36:2,9 39:18,19 39:22 43:21 44:1 44:2,13,14,18 52:7,17 53:10 59:1,6,17 78:16 82:18 88:2 95:24 96:4,21 102:25 103:5 113:23 115:9,13 118:3,17 120:5,6,8,15 131:1 138:14 143:12 151:7 165:25 172:12 174:5,6 182:12 183:12 184:14,22 185:3,3,15 186:6 186:8 weren't 59:18 we'll 5:18 11:18 29:6 36:5 76:16 80:12 103:11 162:11 193:21 we're 5:9,12 7:4 9:17 13:4 15:11 25:19 26:25 27:2 49:10 63:19 73:16 76:22,24 77:3 86:23 94:19,25 95:8,11 108:11 109:5 119:20 122:3,3 124:1 128:11 129:22	140:25 141:19 151:7,18 160:12 164:24 173:16 192:20 194:24 we've 16:14 17:24 26:21 27:20 34:16 59:7 69:13 70:2 73:7 82:14 95:20 96:15 97:5 101:14 116:14 136:23 179:22 191:20 whatnot 179:14 whereof 195:18 Whichever 9:12 while 142:1 white 115:10 whole 39:24 40:1 86:7 94:18 99:5 127:14,15 163:23 182:24 188:19 wide 124:10 win 188:17 189:4 wings 144:12 Withdrawal 3:23 withdrawn 173:11 witness 3:3 41:20 56:17,19 75:9 99:20 101:17 147:3 164:10 192:15 194:20 195:5,8,11,18 witnesses 27:15 98:5,11 161:11 witness's 194:11 WITOLD 2:3 won 188:13 189:10 wondering 43:3 word 14:22 30:17 37:16 44:22 54:11 62:6 68:14 73:7 90:5 93:25 121:22 133:13 167:9 168:2 178:17 words 129:11 work 8:25 22:18 32:12 33:21 43:21 52:15,16 54:1,14 61:7,7 66:11 67:7 104:13 110:17 118:14,16 154:18 157:20 177:2,4,6 181:7,11 184:9 189:25 194:2 worked 175:7 176:24 working 34:4
---	--	--	--	--

DICK M. CARPENTER, II, Ph.D., MAY 17, 2005

24

105:24 111:14 125:18 185:1 works 64:25 105:25 177:10 world 14:24 25:8 69:12 105:24 108:11 110:17 111:14,24 112:2,5 112:14,23,24 124:11 worse 68:13 wouldn't 31:9 43:16 69:14 71:16,24 79:19,20 84:16 91:12 118:19 119:24 122:16 124:17 146:22 156:8 162:19 172:1 woven 66:23 67:1,3 67:20 Wright 2:12 write 23:11 54:16 writing 29:10 119:7 195:8 writings 142:7 written 18:11 24:24 29:9 42:18 145:22 170:14 177:8 178:7 wrong 68:12 88:12 131:14,21 144:17 173:9 wrote 16:3 21:22	192:15 year 69:5 96:12 years 42:14 69:5,6 69:13,13 70:2 96:13 122:5 139:21 yep 14:19 26:3 yesterday 33:25 34:5,13 Z Z 93:2 0 04-2688 1:10 1 1 3:12,13 6:14,15,17 22:5 89:7 1,400 178:10 1:13 100:6 10 132:25 133:1 100 1:20 183:6 106 3:13 12:22 100:4 132 3:16 14 139:20 143 3:17 148 3:18 15 139:21 152 13 2:6 156 3:20 17 1:18 4:2 172 3:23 18th 9:18,21 10:7 19:6,12 181 3:24 19th 9:25 10:8,13 18:15 19:2 1999 148:9 2 2 3:13 106:17,19 2002 29:18 2003 29:3 2004 9:18 10:13 96:11 2005 1:18 4:2 195:20 21 195:20 24 2:12 26th 27:1 26(b)(4) 181:9 3 3 3:14 14:11 132:2,4	157:13 190:13 31st 156:22 313 2:5 36th 1:20 386 20:13,16 85:9 4 4 1:10 3:5,17 15:23 22:6,16 24:11,21 143:18 157:13 4:13 194:25 412 2:7 48105 2:13 5 5 3:18 148:6,8 6 6 3:12,19 38:1 156:16,18 681-7736 2:7 7 7 3:21 172:21,23 734 2:14 8 8 3:24 181:17,19 827-2001 2:14 9 9:39 1:19 4:3 94 189:7 95 189:7 97 189:7 98 189:7 99 189:7		
X X 3:1,9 4:8 66:7 72:15 91:23 93:2 Y Y 93:2 yeah 4:19 8:24 21:16 31:15 32:11 40:11 41:20 43:2 43:15 47:6 67:16 67:17 68:21 70:13 72:8 76:8 77:3 94:7 95:15 105:4 105:9 112:3 115:25 120:23 123:22 128:25 129:4 131:21 133:2 148:12 154:7 162:8 165:2 168:22 178:5,18 181:24 191:24				